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¹Massachusetts Institute of Technology, Cambridge, MA, ²The Cleveland Clinic Foundation, Cleveland, OH.

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D. M. Dinnes¹, J. P. Santerre², R. S. Labow¹; ¹University of Ottawa Heart Institute, Ottawa, ON, CANADA, ²Faculty of Dentistry, Institute for Biomaterials and Biomedical Engineering, University of Toronto, Ottawa, ON, CANADA.

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T. Dutta Roy¹, J. J. Stone², W. Sun³, E. H. Cho⁴, S. J. Lockett⁴, F. W. Wang¹, L. A. Henderson¹; ¹National Institute of Standards and Technology, Gaithersburg, MD, ²North Dakota State University, Fargo, ND, ³Drexel University, Philadelphia, PA, ⁴National Cancer Institute, Frederick, MD.

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T. S. Karande¹, J. Mahadevan², N. A. Peppas², W. Sun³, D. D. Dean¹, C. Agrawal¹; ¹The University of Texas Health Science Center at San Antonio, San Antonio, TX, ²The University of Texas at Austin, Austin, TX, ³Drexel University, Philadelphia, PA.

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M. Reynolds¹, M. Aichelmann-Riedy¹, A. Prudencio², K. Woodward¹, K. E. Uhrich²; ¹University of Maryland Dental School, Baltimore, MD, ²Rutgers University, Piscataway, NJ.

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J. Webb¹, **J. G. Bowsher**², M. M. Grootveld³, J. C. Shelton¹; ¹University of London, London, United Kingdom, ²Loma Linda University Medical Center, Loma Linda, Ca, ³South Bank University, London, United Kingdom.

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T. Akagi¹, S. Nakagawa², M. Baba³, M. Akashi¹; ¹Department of Applied Chemistry, Graduate School of Engineering, Osaka University, Suita, JAPAN, ²Department of Biopharmaceutics, Graduate School of Pharmaceutical Sciences, Osaka University, Suita, JAPAN, ³Division of Antiviral Chemotherapy, Center for Chronic Viral Diseases, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, JAPAN.

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[Surface Modification of Nitinol Alloy by Novel Biocompatible Zwitterionic PEG for Peripheral Arterial Stents](#)

D. Han¹, J. Kim¹, K-D. Ahn¹, J-M. Kim²; ¹Korea Institute of Science and Technology, Seoul 130-650, REPUBLIC OF KOREA, ²Hanyang University, Seoul 133-791, REPUBLIC OF KOREA.

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[Fibrous Scaffolds from Elastomeric Biodegradable PLCL for Cardiovascular Tissue Engineering](#)

S. Chung¹, M. W. King¹, S. Kim²; ¹North Carolina State University, Raleigh, NC, ²Korea Institute of Science and Technology, Seoul, REPUBLIC OF KOREA.

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[Novel Electrospun Polycaprolactone Nanofibrous Scaffolds to use for Tissue Engineering](#)

J. M. Gluck, G. Montero, M. W. King, J. P. Hinstroza; North Carolina State University, Raleigh, NC.

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[Biomimetic nanotechnology: conformational behavior of polypeptides](#)

B. Li¹, J. Rozas², D. Haynie³; ¹WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE, MORGANTOWN, WV, ²University of Louisiana, Lafayette, LA, ³Louisiana Tech University, Ruston, LA.

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K. -. Jahed, A. El-Ghannam; University of Kentucky, Lexington, KY.

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[NOVEL NANOEMULSIONS FOR IMPROVED ORAL DELIVERY OF HYDROPHOBIC DRUGS](#)

S. Tiwari, M. Amiji; Northeastern University, Boston, MA.

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[A comparative Second-Degree Burn Treatment Trial of Collagen Dressing vs. Silver Sulphadiazine Alone](#)

S. Gunasekaran¹, M. Kwolek², A. Dhanikachalam³, R. P. Narayan⁴; ¹Encoll Corp., Fremont, CA, ²Cosmetic Dermatologist, Danville, CA, ³Head of Plastic Surgery, KMC Hospital, Chennai, INDIA, ⁴Head of Plastic Surgery, Sufdarjung Hospital, New Delhi, INDIA.

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J. Pillai, J. Shapiro, A. Mukherjee, S. C. Lee, M. A. Ruegsegger; The Ohio State University, Columbus, OH.

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S. Ghosh, J. F. Mano, J. C. Viana, R. L. Reis; University of Minho, Guimaraes, PORTUGAL.

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[Tetraglyme Plasma Treatment of Polyethylene Tubing Inhibits Platelet Activation: Flow Cytometry Studies](#)

L. Cao, B. D. Ratner, T. A. Horbett; University of Washington, Seattle, WA.

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[Genomic and Morphological Analysis of Human Neuroblastoma Cell Growth in Three-Dimensional Matrices](#)

C. M. Gourd, E. S. Deweerd, L. L. Livi, G. N. Li, D. Hoffman-Kim; Brown University, Providence, RI.

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[Progress in Processing and Evaluation of Hydroxyapatite Ultra-Thin Film Coatings for Coronary Stents](#)

A. Rajtar¹, G. Kaluza², F. Clubb², M. Lien¹, D. Smith¹, D. Hakimi³, Q. Yang³, M. Tsui³, T. Troczynski³; ¹MIV Therapeutics Inc, Vancouver, BC, CANADA, ²Texas Heart Institute, Houston, TX, ³University of British Columbia, Vancouver, BC, CANADA.

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[Macrophage Depletion Diminishes UHMWPE Particle- Induced Inflammatory Osteolysis in a Mouse Model](#)

Y. Ding¹, X. Peng¹, B. Wu¹, P. H. Wooley¹, R. Schwendener², **W. Ren, Sr.**¹;
¹Department of Orthopedic Surgery, Detroit, MI, ²Division of Molecular Cell Biology, Paul Scherrer Institute, SWITZERLAND.

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[Sexual Dimorphism in Osteoblast Response to Surface Microstructure](#)

G. Zhao¹, R. Olivares-Navarrete¹, A. Raines¹, M. A. Duran¹, M. Wieland², B. D. Boyan¹, Z. Schwartz¹; ¹Georgia Institute of Technology, Atlanta, GA, ²Institut Straumann AG, Basel, SWITZERLAND.

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[The Use of Alkanethiols and Circular Dichroism to Monitor Conformational Changes in Adsorbed Proteins](#)

J. Marigliano, R. Latour, Jr., N. Vyavahare; Clemson University, Clemson, SC.

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L. Jongpaiboonkit, S. J. Hollister, J. W. Halloran; University of Michigan, Ann Arbor, MI.

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[Quantifying Individual Cell Migration and Contraction Behavior in a Series of Well-Characterized Collagen-Glycosaminoglycan Scaffolds](#)

B. A. Harley, H-D. Kim, M. H. Zaman, I. V. Yannas, L. J. Gibson; Massachusetts Institute of Technology, Cambridge, MA.

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[Excimer Laser Channel Creation in Polyethersulfone Hollow Fibers for Compartmentalized In Vitro Neuronal Culture Models](#)

C. A. Brayfield, K. G. Marra, J. P. Leonard, W. R. Stauffer, X. T. Cui, J. C. Gerlach; University of Pittsburgh, Pittsburgh, PA.

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[Enhancement of Mineralization From Bone Marrow Cells on a Nano-Structured Titanium Surface](#)

E. Hippensteel, X. Yang, S. Vass, P. Li; DePuy Orthopaedics, Warsaw, IN.

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J. Kobayashi, K. Itoga, M. Yamato, A. Kikucho, T. Okano; Tokyo Women's Medical University, Tokyo, JAPAN.

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[Construction of 3-Dimensional Artificial Tissues by Layer-by-Layer Assembly Technique](#)

Y. Nakahara¹, M. Matsusaki², M. Akashi²; ¹Institute of Biomedical Research and Innovation, Kobe, JAPAN, ²Osaka University, Suita, JAPAN.

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[Cell Morphogenesis and Organization on Electrospun Scaffolds is Guided by Varying Porosity and Fiber Diameter](#)

C. A. Florek¹, P. A. Johnson¹, P. V. Moghe², J. Kohn¹; ¹New Jersey Center for Biomaterials, Rutgers University, Piscataway, NJ, ²Department of Biomedical Engineering, Rutgers University, Piscataway, NJ.

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[In Vivo Cytokine Sampling during the Foreign Body Response](#)

X. Wang¹, D. Loegering², J. Stenken¹; ¹Rensselaer Polytechnic Institute, Troy, NY, ²Albany Medical College, Albany, NY.

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[Nanoporosity of PEOT/PBT Electrospun Scaffolds Enhances Cell Proliferation and Influences Cell Morphology](#)

L. Moroni, R. Licht, J. R. de Wijn, C. A. van Blitterswijk; University of Twente, Utrecht, THE NETHERLANDS.

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[Co-Electrospun Nanofiber Fabrics of Polyester \(PLCL\) with Type I Collagen or Heparin](#)

I. Kwon¹, T. Matsuda², K. Park¹; ¹Purdue University, West Lafayette, IN, ²Kyushu University, Fukuoka, JAPAN.

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[Identification and Initial Characterization of High Affinity Ligands Binding Specifically to Endothelial Progenitor Cells Using Phage Display Screening](#)

A. N. Veleva¹, C. Patterson², S. Cooper³; ¹North Carolina State University, Raleigh, NC, ²University of Chapel Hill, Chapel Hill, NC, ³Ohio State University, Columbus, OH.

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[Neurite Outgrowth in Response to Micropatterned Molecular Cues and Three Dimensional Matrices](#)

C. M. Gourd, V. J. Fong, D. Hoffman-Kim; Brown University, Providence, RI.

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[Resorption of Biomimetic Apatite by Osteoclasts Cultured From Bone Marrow Cells With and Without Vitamin D](#)

E. Hippensteel, J. Longworth, W. Tong, P. Li; DePuy Orthopaedics, Warsaw, IN.

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[Quantitative Effects of NGF Encapsulating PLGA Microsphere on Neurite Outgrowth at Single Cell Level](#)

A. J. Sweeney¹, K. Burg¹, M. Kindy², G. Z. Bruce¹; ¹Clemson University, Clemson, SC, ²Medical University of South Carolina, Charleston, SC.

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[Evaluation of Microcarrier Formulations for Propagation of Osteoblasts and Chondrocytes](#)

P. Phan¹, M. Grzanna¹, A. Polotsky¹, A. Shikani², D. S. Hungerford¹, C. G. Frondoza¹; ¹Johns Hopkins University, Dept of Orthopaedic Surgery, Baltimore, MD, ²Johns Hopkins University, Dept of Otolaryngology, Baltimore, MD.

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[In Vitro Evaluation of Electrospun Nanofiber Conduits for Vascular Substitutes](#)

S. Lee, J. Yoo, G. Lim, A. Atala, J. Stitzel; Wake Forest University School of Medicine, Winston Salem, NC.

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[The effect of substrate topography on the proliferation and morphology of chondrocytes](#)

J. Nam, Y. Huang, M. Anghelina, S. Agarwal, J. Lannutti; The Ohio State University, Columbus, OH.

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A. Khademhosseini¹, G. Eng², J. Yeh², J. Fukuda², J. Blumling III², J. Karp², R. Langer², J. Burdick³; ¹Harvard-MIT, Cambridge, MA, ²MIT, Cambridge, MA, ³University of Pennsylvania, Philadelphia, PA.

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[Mechanism of Bone Formation and Guided Tissue Growth at the Interface with Resorbable Bioactive Implant](#)

A. El-Ghannam, C. Ning; University of Kentucky, Lexington, KY.

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[Histological and Immunohistochemical Study of Biopsies Sampled after Sinus Floor Augmentation Using Tricalcium Phosphate Particles with Varying Porosity](#)

C. Knabe¹, C. Koch¹, A. Rack², M. Stiller¹; ¹Charite University Medical Center, Berlin, GERMANY, ²Helmholtz Research Center, Karlsruhe, GERMANY.

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[Electrospun Acrylic Terpolymer Nanofibers for Engineered Vascular Replacements](#)

A. N. Veleva¹, J. Johnson², D. Heath², C. Patterson³, S. Cooper², J. Lannutti²; ¹North Carolina State University, Raleigh, NC, ²Ohio State University, Columbus, OH, ³University of Chapel Hill, Chappel Hill, NC.

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[*In-Vivo* evaluation of nano-coated calcium phosphate scaffolds for bone regeneration](#)

S. Oh¹, N. Oh², H. Yoon¹, Y. Yang¹, M. Appleford¹, J. Bumgardner³, W. Haggard³, J. Ong¹; ¹University of Tennessee, Memphis, TN, ²Inha University, Incheon, REPUBLIC OF KOREA, ³University of Memphis, Memphis, TN.

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[Control of Cell-Matrix Interactions on Fibrin Bi-layers and Micro-Patterned Surfaces](#)

H. Wang¹, B. Ratner¹, H. Sage², S. Jiang¹; ¹University of Washington, Seattle, WA, ²Hope Heart Program, Benaroya Research Institute at Virginia Mason, Seattle, WA.

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[Oriented Pore Scaffolds from an Elastase-Sensitive, Biodegradable Elastomer to Achieve Mechanical Anisotropy and Improved Cellularization](#)

J. Guan, W. R. Wagner; Univeristy of Pittsburgh, Pittsburgh, PA.

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[Capillary Flow Networks in Collagen-Based Scaffolds for Microvascularized Tissue-Engineered Products](#)

V. Janakiraman, B. L. Kienitz, H. Baskaran; Case Western Reserve University, Cleveland, OH.

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[Controlled chemical oxidation of titanium creates a nanotopography that enhances in vitro osteogenesis](#)

A. Nanci¹, d. Paulo², A. Rosa², S. Zalzal¹, L. Richert¹, J-H. Yi¹, J. Wuest³, F. Rosei⁴; ¹Laboratoire de recherche sur les tissus calcifiés et les biomatériaux, Montreal, PQ, CANADA, ²University of Sao Paulo, Ribeirao Preto, BRAZIL, ³Université de Montréal, Montreal, PQ, CANADA, ⁴INRS-EMT, Varennes, PQ, CANADA.

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[Porogen-induced Surface Modification of Nano-fibrous Poly\(L-lactic acid\) Scaffolds for Bone Tissue Engineering](#)

X. Liu, Y. Won, P. X. Ma; University of Michigan, Ann Arbor, MI.

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[Effects of Nanoscale Pore Size and Microscale Particle Size on Diffusion of Proteinase K out of Sol-Gel Silica](#)

W. Dong, W. Lin, Y. Lin, D. Elmatari, N. Contreras, S. Vo, M. Torres; Cal Poly Pomona, Pomona, CA.

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[Mechanisms of Enhanced Functions of Osteoblasts on Undoped and Yttrium-doped Nanocrystalline Hydroxyapatite](#)

M. Sato¹, M. A. Sambito², A. Aslani², N. M. Kalkhoran², E. B. Slamovich¹, T. J. Webster¹; ¹Purdue University, West Lafayette, IN, ²Spire Biomedical, Inc., Bedford, MA.

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[Layer-by-Layer Assembled Titanium Dioxide Thin Films for Bone Tissue Engineering](#)

S. M. Sriram; Louisiana Tech University, Ruston, LA.

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[AFM Investigation of Fibroblast-Fibroblast Interactions on Collagen Substrates](#)

D. Dean¹, R. Gourdie², T. Borg³, L. Dooley¹, B. Z. Gao¹; ¹Clemson University, Clemson, SC, ²Medical University of South Carolina, Charleston, SC, ³University of South Carolina Medical School, Charleston, SC.

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[Manipulating protein structure and distribution on surfaces to control endothelial cell behavior](#)

L. Liu¹, T. Chao¹, B. D. Ratner¹, H. Sage², S. Jiang¹; ¹University of Washington, Seattle, WA, ²Benaroya Research Institute at Virginia Mason, Seattle, WA.

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[Modulation of osteoblast-like cells, MG-63, on polyelectrolyte multilayer films](#)

W-B. Tsai, S. Tan; National Taiwan University, Taipei, TAIWAN REPUBLIC OF CHINA.

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[The effect of combined hypergravity and microgrooved surface topography on the behavior of fibroblasts](#)

W. Loesberg; Radboud University Nijmegen, Nijmegen, THE NETHERLANDS.

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[Quantitative Assessment of Continuous Infusion of Submicron-Sized Particles](#)

S. G. Ortiz; Stanford Medical School, Stanford, CA.

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[Adsorption-Induced Changes in Protein Bioactivity Correlated with Adsorbed Protein Orientation and Conformation](#)

K. Fears, R. A. Latour; Clemson University, Clemson, SC.

389 - N/A

[Hydrogels from chemically modified PVA with chondroitine sulfate: chemical characterization and biocompatibility](#)

E. C. Muniz, Sr.; Universidade Estadual de Maringá, Maringá, BRAZIL.

390 - N/A

[Epithelial Cell Response to a Chemically Modified, Flexible Substrate, Presenting Nanoscale Topographic Features](#)

T. J. Porri, K. Mallon, J. A. Dumesic, C. J. Murphy, P. F. Nealey; University of Wisconsin-Madison, Madison, WI.

391 - N/A

[Mineralization from Bone Marrow Cells on a Biomimetic Nano-crystalline Apatite Coating: An SEM Study](#)

X. Yang, E. Hippensteel, P. Li; DePuy Orthopaedics, Inc, Warsaw, IN.

392 - N/A

[Generation of Laminin Micropatterns on Biocompatible Substrates Using Microscale Plasma-Initiated Patterning](#)

B. Langowski, **K. E. Uhrich**; Rutgers University, Piscataway, NJ.

393 - N/A

[3D Multi-layered Micro-fabricated Tissue Scaffolds of Biodegradable Polymers](#)

W. Ryu, S. Min, R. J. Fasching, F. B. Prinz; Stanford University, Stanford, CA.

394 - N/A

[U937 Macrophage Adhesion and TNF- \$\alpha\$ and IL-1 \$\beta\$ mRNA Expression on Gelatin-Based Interpenetrating Network \(IPN\) Grafted With PEGylated Fibronectin \(FN\)-Derived Peptides](#)

Q. Gao¹, A. Gustafson¹, W. Kao²; ¹School of Pharmacy, University of Wisconsin-Madison, Madison, WI, ²School of Pharmacy, Department of Biomedical Engineering, University of Wisconsin-Madison, Madison, WI.

395 - N/A

[Controlling Protein Adsorption and Bone Cells Response to PDLA by a Gas Plasma Surface Treatment](#)

C. M. Alves¹, Y. Yang², D. Carnes², J. Ong², V. Sylvia², D. Dean², R. Reis¹, C. Agrawal²; ¹B's Research Group - University of Minho, Braga, PORTUGAL, ²Center for Clinical Bioengineering, UTHSCSA, San Antonio, TX.

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397 - N/A

[Polycarbonate-based Polyurethanes Stimulate Reactive Oxygen Species Production in Macrophages](#)

J. E. McBane¹, J. P. Santerre², R. S. Labow¹; ¹University of Ottawa Heart Institute, Ottawa, ON, CANADA, ²University Toronto, Toronto, ON, CANADA.

398 - N/A

[Effects of Local Infusion of Osteogenic Protein-1 on NSAID-Mediated Bone Formation in vivo](#)

S. Goodman¹, E. Nelson¹, M. Chang¹, T. Ma¹, T. mawatari¹, K. J. Oh², M. Larsen¹, R. L. Smith¹; ¹Stanford University, Stanford, CA, ²Konkuk University, Seoul, REPUBLIC OF KOREA.

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[Studies on the signalling of oxidative stress induced by metallic corrosion products in human endothelial cells *in vitro*](#)

K. Peters, R. Tsaryk, R. E. Unger, M. Fischer, C. Kirkpatrick; Institute of Pathology, Mainz, GERMANY.

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[Inhibitory effect of zinc ions in zinc-containing \$\beta\$ -tricalcium phosphate on function of matured osteoclasts](#)

Y. Yamada¹, A. Ito², H. Kojima², M. Sakane³, S. Miyakawa³, R. Z. LeGros⁴, T. Uemura²; ¹Graduate School of Comprehensive Human Science, University of Tsukuba, Tsukuba, JAPAN, ²AIST(National Institute of Advanced Industrial Science and Technology), Tsukuba Ibaraki, JAPAN, ³Graduate School of Comprehensive Human Science, University of Tsukuba, Tsukuba Ibaraki, JAPAN, ⁴New York University, New York, NY.

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[Material surfaces affect the protein expression patterns of human macrophages: a proteomics approach](#)

D. M. Dinnes¹, H. Marcal², S. M. Mahler³, J. P. Santerre⁴, R. S. Labow¹; ¹University of Ottawa Heart Institute, Ottawa, ON, CANADA, ²Graduate School of Biomedical Engineering, University of New South Wales, Sydney, AUSTRALIA, ³Bioengineering Centre, University of New South Wales, Sydney, AUSTRALIA, ⁴Faculty of Dentistry, Institute for Biomaterials and Biomedical Engineering, University of Toronto, Toronto, ON, CANADA.

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[Effect of various surface adsorbed proteins and phosphorylation inhibitor AG18 upon intracellular signaling proteins in adherent U937 cells identified by LC/MS](#)

S. T. Zuckerman, W. J. Kao; University of Wisconsin-Madison, Madison, WI.

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[Measuring the Biologic Reactivity of Implant Debris Using In Vitro Cellular Reactivity Correlated with In Vivo Serum Biomarkers](#)

M. Caicedo, S. Anderson, A. Reddy, J. J. Jacobs, **N. J. Hallab**; Rush University Medical Center, Chicago, IL.

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[Effect of Surface Chemistry on Dendritic Cell Responses and Profile of Carbohydrates Associated with Adsorbed Proteins](#)

S. Shankar¹, B. Keselowsky¹, R. Cornelius², J. Brash², A. Garcia¹, J. Babensee¹; ¹Georgia Institute of Technology, Atlanta, GA, ²McMaster University, Hamilton, ON, CANADA.

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[Promotion of neurite outgrowth on multi-molecular gradients by modulating downstream Rho pathways](#)

E. S. Deweerd; Brown University, Providence, RI.

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[Measurement of Cytokines Collected from Lipopolysaccharide-Stimulated Monocytes](#)

R. J. Schutte, D. Wang, W. Reichert; Duke University, Durham, NC.

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[Effects of Heparin on MC3T3-E1 Osteoblast-like Cell Behavior](#)

T. Jiang, C. T. Laurencin; University of Virginia, Charlottesville, VA.

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[Effects of Simulated Microgravity on Human Osteoblast Behavior: A Proteomics Study](#)

H. L. Nichols¹, N. Zhang¹, S. Holton², X. Wen¹; ¹Clemson University, Charleston, SC, ²University of South Carolina, Columbia, SC.

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[Fibronectin-mimetic Surfaces Directing \$\alpha_5\beta_1\$ Integrin-Mediated Adhesion, Signaling, and Proliferation](#)

T. A. Petrie, J. R. Capadona, A. J. Garcia; Georgia Institute of Technology, Atlanta, GA.

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[Effect of Changing Surface Hydrophobicity Alters Protein Expression and Cellular Dynamics](#)

I. S. Miller¹, S. C. Penney¹, D. P. O'Connor¹, I. Lynch², K. Dawson², W. M. Gallagher¹; ¹UCD School of Biomolecular and Biomedical Science, Conway Institute of Biomolecular and Biomedical Research, Dublin, IRELAND, ²Centre for Colloid Science and Biomaterials, School of Chemistry and Chemical Biology, University College Dublin, Ireland, Dublin, IRELAND.

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[Influence of Smooth Muscle Cell Phenotype on Endothelial Cell Response to Biomaterial-Pretreated Leukocytes in an EC/SMC Co-Culture Model](#)

S. Rose, J. Babensee; Georgia Institute of Technology, Atlanta, GA.

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[In Vitro Metal-Reactivity Is Associated With In Vivo Metal-Specific Antibodies \(IgG\) In Individuals with Metal Implants](#)

M. S. Caicedo, A. Reddy, S. Anderson, J. J. Jacobs, **N. J. Hallab**; Rush University Medical Center, Chicago, IL.

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[Enhanced ECM regeneration in Mechano-active vascular tissue engineering](#)

Y. KIM¹, J. LIM², S-H. KIM², S. KIM²; ¹Gwangju Inst Sci Tech (GIST), Gwangju, REPUBLIC OF KOREA, ²Korea Inst Sci Tech (KIST), Seoul, REPUBLIC OF KOREA.

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[Characterization of Single lumen and Multi-channel Poly\(-capro-lactone-fumarate\)\(PCLF\) for Experimental Nerve and Spinal Cord Repair](#)

I. A. Onyeneho, G. C. W. de Ruiter, S. Wang, L. Lu, J. Gruetzmacher, R. J. Spinner, B. Currier, A. J. Windebank, M. J. Yaszemski; Mayo Clinic College of Medicine, Rochester, MN.

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[Adjuvant-like Activity of Silicone Breast Implants against Extracellular Matrix Molecules](#)

R. C. de Guzman, P. H. Wooley, P. J. VandeVord; Wayne State University, Detroit, MI.

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[Biological reponse of calcium phosphate ceramics synthesized by using recycled eggshell](#)

N. Oh¹, S. Song¹, J. Choi¹, S. Oh², S. Lee³, M. Lee⁴; ¹Inha University, Incheon, REPUBLIC OF KOREA, ²University of Tennessee, Memphis, TN, ³Mokpo National University, Mokpo, REPUBLIC OF KOREA, ⁴Korea Institute of Ceramic Eng.&Tech., Seoul, REPUBLIC OF KOREA.

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[Investigation of the Wound Healing Processes in the Region Adjacent to an Implanted Biosensor by Application of Electrical Impedance Spectroscopy](#)

F. B. Karp¹, T. Valdes², K. Böhringer¹, B. Ratner¹; ¹University of Washington, Seattle, WA, ²University of Connecticut Health Center, Farmington, CT.

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[Poly\(propylene fumarate\)-co-Poly\(\$\epsilon\$ -caprolactone\) Tube for Guided Nerve Regeneration](#)

S. Wang, G. C. W. de Ruiter, A. M. Knight, L. Lu, R. J. Spinner, B. L. Currier, A. J. Windebank, M. J. Yaszemski; Mayo Clinic, Rochester, MN.

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[Evaluation of biological tissue response of b-TCP bone substitute in high molecular sodium hyaluronate matrix in sheep for improved handling properties](#)

Y. Bruderer¹, T. Stoll¹, P. Schupbach²; ¹Synthes, Oberdorf, SWITZERLAND, ²Peter Schüpbach GmbH, Mikroskopische Analysen, Horgen, SWITZERLAND.

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[Neurotoxicity Screening Test for Deep Brain Stimulation Leads](#)

S. M. Hooper; Advanced Neuromodulation Systems, Inc., Plano, TX.

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[Peripheral Nerve Regeneration by a Novel Microporous PLGA/Pluronic Nerve Guide Conduit](#)

S. Oh¹, J. Kim¹, S. Ghil², J. Yoon¹, K. Song³, B. Jeon³, I. Lee⁴, **J. Lee**¹; ¹Hannam University, Daejeon, REPUBLIC OF KOREA, ²Kyonggi University, Suwon, REPUBLIC OF KOREA, ³Chungnam National University Hospital, Daejeon, REPUBLIC OF KOREA, ⁴Catholic University Hospital, Daejeon, REPUBLIC OF KOREA.

Clinical Relevance of Stent Fractures, Cause, Effect, and Improved Designs

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[Biopolymer-Hydroxyapatite Matrix Composite Coatings for Stents](#)

Q. Yang¹, M. Tsui¹, M. Lien², D. Smith², A. Rajtar², T. Troczynski¹; ¹The University of British Columbia, Vancouver, BC, CANADA, ²MIV Therapeutics Inc, Vancouver, BC, CANADA.

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[Curcumin-loaded bioresorbable stents based on internally coiled helix designs](#)

A. Dasnurkar; University of Texas Southwestern Medical School, Dallas, TX.

Fibrin Sealant and its Application in Tissue Engineering

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[Recombinant fibrinogen synthesis: transient transfection CHO cells in suspension](#)

L. Yang; Laboratory for Regenerative Medicine and Pharmacobiology, Lausanne, SWITZERLAND.

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[Optimisation of a Fibrin Scaffold for Sustained Release of an Adenoviral Gene Vector](#)

A. M. Breen¹, P. Strappe², T. H. Barker³, J. A. Hubbell³, T. O'Brien², A. S. Pandit¹;
¹National Centre for Biomedical Engineering and Science, Galway, IRELAND,
²Regenerative Medicine Institute, Galway, IRELAND, ³Ecole Polytechnique Federale de Lausanne, Lausanne, SWITZERLAND.

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[DNA Ligands for Integrating Biointeractive Materials](#)

R. Mittal, N. R. Washburn, K. L. Robertson, B. A. Armitage; Carnegie Mellon University, Pittsburgh, PA.

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[Use of Radiochemically Sterilized, Absorbable Tissue Adhesive for Cat and Dog Lung Repair](#)

S. W. Shalaby¹, D. Nickelson², M. A. Vaughn¹, T. Kennedy², P. L. Tate¹; ¹Poly-Med, Inc., Anderson, SC, ²Veterinary Products Laboratories, Phoenix, AZ.

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[Sustained Release of Transforming Growth Factor-Beta 1 from PEGylated Fibrin Gels](#)

C. T. Drinnan¹, G. Zhang², J. Zhang², L. J. Suggs¹; ¹University of Texas at Austin, Austin, TX, ²University of Minnesota, Minneapolis, MN.

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[Plasminogen Free Fibrin Sealant](#)

A. J. Gorman; Ethicon Inc, Somerville, NJ.

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[MAP Cell Binding Domain to Attach R28 Retinal Stem Cells to RCS Eyecups Over Time](#)

M. P. Olivieri, M. I. Hurley, L. Trawally, R. Quarshie, C. Gurita; D'Youville College, Buffalo, NY.

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[Evaluation of Chitosan/ \$\beta\$ -TCP/Platelet-Rich Plasma Microspheres to Bone Repairing Materials](#)

S-M. Kuo¹, T. Wang¹, L-C. Lin², S. Chang¹; ¹Department of Biomedical Engineering, Kaohsiung County, TAIWAN REPUBLIC OF CHINA, ²Orthopedic Department of Veteran General Hospital, Kaohsiung, TAIWAN REPUBLIC OF CHINA.

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[Use of Radiochemically Sterilized, Absorbable Tissue Adhesive for Rabbit Kidney Repair](#)

P. L. Tate, **B. L. Anneaux**, M. A. Vaughn, S. W. Shalaby; Poly-Med, Inc., Anderson, SC.

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[Synthesis and Characterization of Injectable Bioreponsive Hydrogels for Soft Tissue Replacement](#)

J. D. Thomas¹, M. Marcolongo¹, G. W. Fussell², A. M. Lowman¹; ¹Drexel University, Philadelphia, PA, ²Synthes-Spine, West Chester, PA.

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[Mechanical Properties of Cell Seeded Porous Hydroxyapatite Scaffolds](#)

M. Appleford¹, S. Oh¹, Y. Yang¹, J. Bumgardner², W. Haggard², J. L. Ong¹; ¹University of Tennessee Health Science Center, Memphis, TN, ²University of Memphis, Memphis, TN.

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[Effect of Human Fibroblasts Over the Osteoblastic Activity of Human Osteoblastic-like Cells: Role for Cell-Cell Interactions](#)

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Y. Yuan¹, L. D. T. Topoleski¹, W. J. Mergner², L. Li³; ¹UMBC, Baltimore, MD, ²Univ. Maryland, Baltimore, MD, ³Office of the State Medical Examiner, Baltimore, MD.

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K. Levi¹, K. S. Wu¹, K. P. Ananthapadmanabhan², R. H. Dauskardt¹; ¹Stanford University, Stanford, CA, ²Unilever Research and Development, Trumbull, CT.

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J. M. Lindsey, III¹, M. Shalaby², S. W. Shalaby¹; ¹Poly-Med, Inc., Anderson, SC, ²Lehigh Valley Hospital, Allentown, PA.

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K. L. Fitzpatrick¹, Y-I. Yang², K. R. Kirker¹, M. Massey³, J. Shelby¹; ¹Bacterin International, Inc., Belgrade, MT, ²School of Medicine, Inje University, Gae-Kum-dong, Pusan-Jin-gu, Pusan, REPUBLIC OF KOREA, ³Department of Surgery, University of Utah, Salt Lake City, UT.

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S. Gogolewski¹, K. Gorna¹, E. Zaczynska², B. Zywicka³, A. Czarny²; ¹Polymer Research, AO Research Institute, Davos, SWITZERLAND, ²Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wroclaw, POLAND, ³Institute of Experimental Surgery and Biomaterials Research, Medical University, Wroclaw, POLAND.

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K. L. Calvert¹, L. A. Kirkpatrick², K. P. Trumble¹, T. J. Webster¹; ¹Purdue University, West Lafayette, IN, ²Zimmer, Inc., Warsaw, IN.

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Y. Sun, R. A. Latour; Clemson University, Clemson, SC.

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M. Muenchinger¹, A. Franz², C. Reinschmidt¹; ¹Zimmer GmbH, Winterthur, SWITZERLAND, ²St. Marienkrankenhaus, Siegen, GERMANY.

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M. W. Kovacik¹, J. D. Ehrman², E. T. Bender², N. Stojilovic², R. D. Ramsier²; ¹Summa Health System Hospitals, Akron, OH, ²The University of Akron, Akron, OH.

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L. M. Valenzuela¹, A. Gubskaya², J. Kohn¹, D. Knight²; ¹New Jersey Center for Biomaterials, Rutgers University, Piscataway, NJ, ²Dept. of Mechanical & Aerospace Engineering, Rutgers University, Piscataway, NJ.

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D. Pulavarthi¹, D. Knight¹, J. Kohn²; ¹Rutgers-The State University of New Jersey, piscataway, NJ, ²Rutgers-The State University of New Jersey and NJ center for Biomaterials, piscataway, NJ.

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F. Wang, D. Y. Sun, S. J. Stuart, R. A. Latour, Jr.; Clemson University, Clemson, SC.

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C. Schröder¹, S. Braschoß¹, H. Schubert¹, U. Gross²; ¹TU Berlin, Berlin, GERMANY,
²Freie Universität Berlin, Berlin, GERMANY.

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S. M. Henry, C. M. Pirie, M. E. H. El-Sayed, P. S. Stayton, A. S. Hoffman; University of Washington, Seattle, WA.

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T. Yamaoka¹, T. Kitagawa², K. Ishihara³, A. Mahara¹, A. Murakami², A. Kishida⁴;
¹National Cardiovascular Center Research Institute, Suita, JAPAN, ²Kyoto Institute of Technology, Kyoto, JAPAN, ³The University of Tokyo, Tokyo, JAPAN, ⁴Tokyo Medical and Dental University, Tokyo, JAPAN.

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L. Hahn; Harvard University, Cambridge, MA.

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J. R. Kovacs¹, Y. Zheng¹, L. Jia¹, E. S. Gawalt¹, H. Shen², **W. S. Meng**¹; ¹Duquesne University, Pittsburgh, PA, ²University of Pittsburgh, Pittsburgh, PA.

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H. Uludag¹, E. Tunis¹, V. Incani¹, C. Kucharski¹, B. Acan¹, A. Lavasanifar¹, Y. Li¹, A. Ghahary²; ¹University of Alberta, Edmonton, AB, CANADA, ²University of British Columbia, Vancouver, BC, CANADA.

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[Cell Binding and Cytotoxicity of Palmitic-Acid Modified Polyethylenimine \(PEI\) and Poly-L-lysine \(PLL\) on Bone Marrow Stromal Cells \(BMSC\)](#)

V. Incani, C. Olson, E. Tunis, C. Kucharski, H. Uludag; University of Alberta, Edmonton, AB, CANADA.

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W. Li; University of Rostock, Rostock, GERMANY.

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D. Duan; McMaster University, Hamilton, ON, CANADA.

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B. J. Staples, B. Roeder, W. G. Pitt; Brigham Young University, Provo, UT.

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N. J. Hallab, S. Anderson, A. Reddy, M. Caicedo, J. J. Jacobs; Rush University Medical Center, Chicago, IL.

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X. Walboomers, M. E. L. Nienhuijs, M. A. W. Merks, P. J. W. Stoelinga, J. A. Jansen; Radboud University Nijmegen Medical Center, Nijmegen, THE NETHERLANDS.

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m. kazemzadeh narbat; Materials and Energy Research Center, karaj, IRAN (ISLAMIC REPUBLIC OF).

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M. A. Tucci, **H. A. Benghuzzi**; University of Mississippi Medical Center, Jackson, MS.

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G. M. Cruise¹, D. L. Elbert², J. C. Shum¹; ¹MicroVention, Inc., Aliso Viejo, CA,
²Washington University in St. Louis, St. Louis, MO.

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J. Chang, H. Li, W. Zhai; Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai, CHINA.

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W. F. Regnault¹, T. B. Icenogle¹, J. M. Antonucci², D-W. Liu², D. Skrtic³; ¹Food and Drug Administration, Rockville, MD, ²National Institute of Standards and Technology, Gaithersburg, MD, ³American Dental Association Foundation, Gaithersburg, MD.

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S. Lyu, J. Schley, C. Hobot, R. Sparer; Medtronic Inc, Minneapolis, MN.

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A. J. McManus, R. C. Moser, R. B. Dabkowski, K. A. Thomas; MacroPore Biosurgery, San Diego, CA.

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K. A. Thomas; MacroPore Biosurgery, San Diego, CA.

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N. Durán, Sr.; Universidade Estadual de Campinas, Campinas, BRAZIL.

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R. F. Brown, T. King, L. Peddi, R. K. Brow; University of Missouri-Rolla, Rolla, MO.

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J. Chang¹, W. Xia¹, J. Zhong²; ¹Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai, CHINA, ²NovaBone Products, LLC, Alachua, FL.

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E. Jabbari; University of South Carolina, Columbia, SC.

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M. Masuda¹, M. Okada¹, S. Yasuda¹, H. Kadono¹, R. Tanaka², K. Miyatake³, T. Furuzono¹; ¹Department of Biomedical Engineering, National Cardiovascular Center Research Institute, Suita/city.Osaka, JAPAN, ²National Cardiovascular Center, Suita/city.Osaka, JAPAN, ³National Hospital Organization Osaka Minami Medical Center, Kawachinagano/city.Osaka, JAPAN.

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P. A. Gunatillake¹, R. Adhikari¹, R. T. A. Mayadunne¹, S. Houshyar¹, L. Hanu¹, J. Field¹, M. McGee¹, M. McGee¹, **J. Werkmeister**², D. Menzis¹, T. Moore², I. Griffiths¹; ¹PolyNovo Biomaterials, Clayton South, AUSTRALIA, ²CSIRO Molecular & Health Technologies, Clayton South, AUSTRALIA.

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R. T. A. Mayadunne¹, P. A. Gunatillake¹, R. Adhikari¹, I. M. Griffiths¹, J. R. Field², S. Houshyar¹, L. Hanu¹, D. Menzis¹, T. Moore¹, P. Johnston¹, L. Tatai¹, M. Wickramaratna¹; ¹PolyNovo Biomaterials Pty. Ltd., Clayton Sout MDC, Victoria, AUSTRALIA, ²Flinders University, Adelaide, AUSTRALIA.

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J. H. Song¹, B. H. Yoon¹, S. H. Lee¹, I. K. Jun¹, H. E. Kim¹, H. W. Kim²; ¹Seoul National University, Seoul, REPUBLIC OF KOREA, ²Dankook University, Cheonan, REPUBLIC OF KOREA.

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A. Alessandrino¹, A. Boschi², M. Colombo¹, S. Fare¹, **M. C. Tanzi**¹, G. Freddi²; ¹Politecnico di Milano, Milan, ITALY, ²Silk Experimental Station, Milan, ITALY.

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A. Enderle; Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim, GERMANY.

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A. C. Jayasuriya; Medical University of Ohio at Toledo, Toledo, OH.

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H. Yu, S-Y. Yang, H. W. Matthew, C. D. Huber, P. H. Wooley; Wayne State University, Detroit, MI.

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S. Lipka, J. Maloney; MicroCHIPS, Inc., Bedford, MA.

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J. Mercuri, S. Shah, E. Pardue, J. Isenburg, D. Simionescu, N. Vyavahare; Clemson University, Clemson, SC.

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A. Doraiswamy¹, R. J. Narayan¹, A. Ovsianikov², R. Modi³, D. B. Chrisey³, B. Chichkov³; ¹University of North Carolina, Chapel Hill, NC, ²Laser Zentrum Hannover eV., Hannover, GERMANY, ³U. S. Naval Research Laboratory, Washington, DC.

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A. V. Gubskaya; Rutgers University, The State University of New Jersey, Piscataway, NJ.

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H-W. Kim; Dankook University, Cheonan, REPUBLIC OF KOREA.

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B-H. Yoon¹, H-W. Kim², J-H. Song¹, H-E. Kim¹; ¹Seoul National University, Seoul, REPUBLIC OF KOREA, ²Dankook University, Cheonan, REPUBLIC OF KOREA.

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E-J. Lee, H-W. Kim, H-E. Kim; seoul national university, seoul, REPUBLIC OF KOREA.

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M-H. Lee¹, W-S. Seo¹, J-S. Han², D-H. Kim³, N-S. Oh⁴; ¹Korea Institute of Ceramic Engineering and Technology, Seoul, REPUBLIC OF KOREA, ²Seoul National University, Seoul, REPUBLIC OF KOREA, ³Che-Il Dental Laboratory, Seoul, REPUBLIC OF KOREA, ⁴Inha University, Incheon, REPUBLIC OF KOREA.

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M. Deng, D. Jamiolkowski, J. Zhou, G. Chen, Y. Xu, T. Barbolt; Ethicon, Inc., Somerville, NJ.

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E. D. Jacobson, M. T. Fulmer, P. J. Leamy, P. W. Schaut, X. Liu; Synthes, West Chester, PA.

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N. Cheema¹, N. Hawkins², S. Salkeld¹, S. Cook³, K. Bailey²; ¹Fellowship of Orthopaedic Researchers, Metairie, LA, ²EBI, LP, Parsippany, NJ, ³Tulane University School of Medicine, New Orleans, LA.

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K. Liu, B. Thomas, K. Day, D. Yakimicki, J. Mason; Zimmer Holdings, Inc, Warsaw, IN.

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P. J. Leamy, M. T. Fulmer, M. Lehmiche; Synthes, West Chester, PA.

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J. A. Henry; National Centre for Biomedical Engineering Science, NUI Galway, Galway, IRELAND.

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J. A. Henry; National Centre for Biomedical Engineering Science, NUI Galway, Galway, IRELAND.

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X. Liu, M. Fulmer; Synthes, West Chester, PA.

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[The effects of fiber length and loading on the handling and mechanical properties of a calcium phosphate material](#)

E. D. Jacobson, P. J. Leamy, X. Liu, P. W. Schaut, D. Armbruster, M. T. Fulmer; Synthes, West Chester, PA.

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S. J. Stachelek¹, I. Alferiev¹, M. S. Sacks², R. J. Levy¹; ¹Children's Hospital of Philadelphia, Philadelphia, PA, ²University of Pittsburgh, Pittsburgh, PA.

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K. E. Good, K. Sly, S. Lin; Exactech, Inc., Gainesville, FL.

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M. Livnat¹, Y. Tal¹, J. Boss², J. Bejar², **D. Seliktar**²; ¹Regentis Biomaterials Ltd., Haifa, ISRAEL, ²Technion, Haifa, ISRAEL.

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J. L. Simon, J. Manocchio, P. D'Antonio; EBI, LP, Parsippany, NJ.

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S-T. Li; Collagen Matrix Inc., Franklin Lakes, NJ.

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T. D. Clineff, J. P. Murphy, J. G. Marx; Orthovita, Inc., Malvern, PA.

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J. L. Simon, J. Manocchio, P. D'Antonio; EBI, LP, Parsippany, NJ.

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S-T. Li; Collagen Matrix Inc., Franklin Lakes, NJ.

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W. R. Walsh¹, M. Borden², **J. Hernandez**²; ¹Uni New South Wales, Randwick, Sydney, NSW, AUSTRALIA, ²Interpore-Cross International, Irvine, CA.

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A. C. Jayasuriya; Medical University of Ohio at Toledo, Toledo, OH.

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Z. M. Seeley; Washington State University, Pullman, WA.

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[In vivo comparison of ACL reconstruction in the ovine model between a sterile allograft and autograft tendon](#)

R. E. Olsen¹, A. M. York², C. W. Robinson¹, A. A. Zhukauskas², J. R. Bianchi²; ¹Frontier BioMedical Inc., Logan, UT, ²Regeneration Technologies Inc., Alachua, FL.

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[Crosslinking Characteristics and Shape Memory Effect of a Biodegradable Multiblock Copolymer Poly\(propylene fumarate\)-co-Poly\(ε-caprolactone\)](#)

S. Wang, L. Lu, J. A. Gruetzmacher, K-w. Lee, B. L. Currier, M. J. Yaszeski; Mayo Clinic, Rochester, MN.

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T. A. Snyder¹, C. Johnson, Jr.¹, J. Woolley¹, P. Wearden², A. Koert³, S. Richardson³, K. Dasse³, H. S. Borovetz¹, W. R. Wagner¹; ¹University of Pittsburgh, Pittsburgh, PA, ²Children's Hospital of Pittsburgh, Pittsburgh, PA, ³Levitronix, Waltham, MA.

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L. Jones, II¹, G. Lewis², P. Biggs¹; ¹Chicago State University, Chicago, IL, ²The University of Memphis, Memphis, TN.

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S. Kim; Yeungnam University, Gyeongbuk, REPUBLIC OF KOREA.

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S. Wang, D. H. Kempen, L. Lu, J. A. Gruetzmacher, T. Hefferan, B. L. Currier, M. J. Yaszemski; Mayo Clinic, Rochester, MN.

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[Controllable Properties of Photocrosslinked Blends of Poly\(propylene fumarate\) and Poly\(caprolactone fumarate\)](#)

S. Wang, D. H. Kempen, L. Lu, J. A. Gruetzmacher, B. L. Currier, M. J. Yaszemski; Mayo Clinic, Rochester, MN.

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Y. Kogai¹, S. Yasuda¹, M. Okada², J. Tanaka³, T. Furuzono²; ¹Innovation Plaza Osaka, Japan Science and Technology Agency, Izumi/city, Osaka, JAPAN, ²Department of Biomedical Engineering, National Cardiovascular Center Research Institute, Suita/city, Osaka, JAPAN, ³Independent Administrative Institution National Institute for Materials Science, Tsukuba/city, Ibaraki, JAPAN.

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N. Duran; Universidade Estadual de Campinas, Campinas, BRAZIL.

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M. D. Ridley, M. S. Jahan; University of Memphis, Memphis, TN.

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Z. Lu¹, H. McKellop¹, T. Schmalzried²; ¹Orthopaedic Hospital/UCLA, Los Angeles, CA, ²The Joint Replacement Institute, Los Angeles, CA.

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[A long-term Wear study of 28mm UHMWPE Hip liners against Silicon Nitride Versus Cobalt Chrome Femoral Heads](#)

J. G. BOWSHER¹, T. K. DONALDSON¹, D. D. GREEN¹, R. LAKSHMINARAYANAN², A. KHANDKAR², I. C. CLARKE¹; ¹LOMA LINDA UNIVERSITY, LOMA LINDA, CA, ²AMEDICA, Salt lake city, UT.

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[No or Extremely Low Wear Debris from Cross-Linked Polyethylene Cups](#)

H. G. Willert¹, I. Lang¹, L. Rabenseifner², R. Hilgers¹; ¹University of Goettingen, Goettingen, GERMANY, ²Department of Orthopaedics, General Hospital, Baden-Baden, GERMANY.

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P. A. Williams, D. D. Green, N. L. Caffery, I. C. Clarke; Loma Linda University Medical Center, Loma Linda, CA.

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J. G. BOWSHER, P. A. WILLIAMS, D. D. GREEN, I. C. CLARKE, T. K. DONALDSON; LOMA LINDA UNIVERSITY, LOMA LINDA, CA.

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R. Tsukamoto¹, M. Ogino², K. Yamada³, G. Pezzotti³, H. Shoji¹, I. C. Clarke¹; ¹Loma Linda University, Loma Linda, CA, ²Tsukamoto Orthopaedic Hospital, Tokyo, JAPAN, ³Kyoto Institute of Technology, Kyoto, JAPAN.

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S-J. Chang¹, T. Kuan¹, S. Kuo¹, Y. Wang², Y. Wang³; ¹I-Shou University, Kaohsiung County,, TAIWAN REPUBLIC OF CHINA, ²Yang Ming University, Taipei, TAIWAN REPUBLIC OF CHINA, ³Yang Ming University, Taipei, TAIWAN REPUBLIC OF CHINA.

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A. J. Wirtel, III¹, M. D. Kofron¹, X. Li¹, A. Mesfin², C. T. Laurencin¹; ¹University of Virginia, Charlottesville, VA, ²Drexel University, Philadelphia, PA.

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B. D. Boyan¹, M. Duran¹, S. Safavynia¹, G. Barabino², B. J. Simon³, Z. Schwartz¹; ¹Georgia Institute of Technology, Atlanta, GA, ²Northeastern University, Boston, MA, ³EBI, LP, Parsippany, NJ.

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S. Shanmugasundaram¹, A. S Mautone², M. Jaffe¹, L. Rizio³, T. Livingston Arinze¹; ¹New Jersey Institute of Technology, Newark, NJ, ²University of Virginia, Richmond, VA, ³New Jersey Sports Medicine Institute, Verona, NJ.

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M. Timmer¹, K. Cesnulevicius¹, J. Grosskreutz¹, L. Just², J. Bufler¹, C. Grothe¹; ¹Hannover Medical School, Hannover, GERMANY, ²University of Tübingen, Tübingen, GERMANY.

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M. H. Mankani¹, S. A. Kuznetsov², P. Gehron Robey²; ¹UCSF, San Francisco, CA, ²NIDCR- NIH, Bethesda, MD.

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M. L. Ormiston¹, G. Karoubi¹, J. Chan¹, D. J. Stewart², D. W. Courtman¹; ¹University of Toronto, Toronto, ON, CANADA, ²St. Michael's Hospital, Toronto, ON, CANADA.

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S. H. Bakhru, T. W. Link, H. Song, H-Q. Mao; Johns Hopkins University, Baltimore, MD.

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Y-I. Yang¹, **K. R. Kirker**², M. Massey³, J. Shelby²; ¹School of Medicine, Inje University, Gae-Kum-dong, Pusan-Jin-gu, Pusan, REPUBLIC OF KOREA, ²Bacterin International, Inc., Belgrade, MT, ³Department of Surgery, University of Utah, Salt Lake City, UT.

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C. C. Larsen¹, F. Kligman², R. E. Marchant¹, K. Kottke-Marchant²; ¹Case Western Reserve University, Cleveland, OH, ²Cleveland Clinic Foundation, Cleveland, OH.

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K. Chatterjee¹, E. A. Vogler², C. A. Siedlecki¹; ¹Penn State College of Medicine, Hershey, PA, ²Penn State University, University Park, PA.

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M. Zhang, Y. Wu, T. A. Horbett; University of Washington, Seattle, WA.

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J. F. Alvarez-Barreto¹, S. Mullin¹, M. Shreve², P. DeAngelis², V. Sikavitsas¹; ¹University of Oklahoma, Norman, OK, ²University of Oklahoma Health Science Center, Oklahoma City, OK.

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B. Zhao¹, I. Han¹, W. Bai², H. Feng², F-Z. Cui³, **I-S. Lee**¹; ¹Yonsei University, Seoul, REPUBLIC OF KOREA, ²Peking University, Beijing, CHINA, ³Tsinghua University, Beijing, CHINA.

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H. Yuan¹, C. A. van Blitterswijk¹, K. de Groot¹, J. D. de Bruijn²; ¹University of Twente, Enschede, THE NETHERLANDS, ²Queen Mary University of London, London, UNITED KINGDOM.

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P. L. Tate¹, M. A. Hucks¹, **S. Nagatomi**¹, M. A. Vaughn¹, M. Shalaby², S. W. Shalaby¹; ¹Poly-Med, Inc., Anderson, SC, ²Lehigh Valley Hospital, Allentown, PA.

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P. Soman¹, Z. Rice², L-C. Xu¹, C. Siedlecki¹; ¹Pennsylvania State University, Hershey, PA, ²The University of Texas at Austin, Austin, TX.

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S. A. Chowdhury¹, Y. K. Vohra¹, J. E. Lemons¹, M. Ueno², J. Ikeda²; ¹University of Alabama at Birmingham, Birmingham, AL, ²Japan Medical Materials Corporation (JMMC), Osaka, JAPAN.

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S-Q. Wu¹, M. Phaneuf², F. LoGerfo¹; ¹Beth Israel Deaconess Medical Center, Boston, MA, ²BioSurfaces, Ashland, MA/Beth Israel Deaconess Medical Center, Boston, MA.

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Y-T. Sul¹, E. Byon², B-S. Kang¹, A. Wennerberg¹; ¹Dept. of Biomaterials, Gothenburg University, Gothenburg, SWEDEN, ²Korea Institute of Machinery and Materials, Changwon, REPUBLIC OF KOREA.

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L. J. Pogula¹, M. W. Kovacic², D. A. Noe², M. J. Askew²; ¹The University of Akron, Akron, OH, ²Summa Health System Hospitals, Akron, OH.

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A. Montali¹, O. Jahn¹, X. Liu²; ¹Synthes GmbH, Oberdorf, SWITZERLAND, ²Synthes, West Chester, PA.

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J. Gaumer¹, J. Lannutti¹, A. Kohm², P. Pavka¹, L. Pruitt², M. Reis³, V. Ravula¹, T. Dey¹, G. Li¹; ¹The Ohio State University, Columbus, OH, ²University of California Berkeley, Berkeley, CA, ³University of California San Francisco, San Francisco, CA.

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X. LIU; Johns Hopkins University, BALTIMORE, MD.

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S-S. Kim¹, **S-J. Gwak**², K-M. Ahn¹, M. Park², J-H. Lee¹, C. Choi¹, B-S. Kim²; ¹Seoul National University, Seoul, REPUBLIC OF KOREA, ²Hanyang university, Seoul, REPUBLIC OF KOREA.

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G. K. Toworfe¹, R. J. Composto¹, C. S. Adams, IV², I. M. Shapiro², P. Ducheyne¹;
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A. Stanishevsky, S. Chowdhury, P. Chinoda; University of Alabama at Birmingham,
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M. G. McCord, X. Wang, S. A. Barcio, J. R. Gentry, N. A. Monteiro-Riviere; NC State
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J. L. Sharon, D. A. Puleo; University of Kentucky, Lexington, KY.

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R. Howald¹, U. Kesteris², M. Wittwer³, R. Klabunde¹, J. Krevolin¹; ¹Zimmer Corporate
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A. S. Rufner, R. A. Gsell, H. E. Brinkerhuff, M. E. Hawkins; Zimmer, Inc., Warsaw, IN.

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B. F. Bell, Jr.¹, N. Majdi¹, H. Jo², M. Wieland³, Z. Schwartz¹, B. D. Boyan¹; ¹Georgia Institute of Technology, Atlanta, GA, ²Emory University Medical School, Atlanta, GA, ³Institut Straumann AG, Basel, SWITZERLAND.

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B. G. Keselowsky¹, K. E. Burns², C. C. Tate², M. C. LaPlaca², J. E. Babensee², A. J. Garcia²; ¹University of Florida, Gainesville, FL, ²Georgia Institute of Technology, Atlanta, GA.

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G. GUPTA, A. El-Ghannam; UNIVERSITY OF KENTUCKY, LEXINGTON, KY.

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[Reduction of Pseudomonas Aeruginosa Biofilms In Vitro and Attenuation of Foreign Body Response In Vivo by Salicylic Acid-Derived Poly\(Anhydride-Esters\)](#)

J. Bryers¹, R. Jarvis², J. Lebo², A. Prudencio³, T. Kyriakides⁴, **K. E. Uhrich**³; ¹University of Washington, Seattle, WA, ²University of Connecticut Health Center, Farmington, CT, ³Rutgers University, Piscataway, NJ, ⁴Yale University, New Haven, CT.

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E. S. Gawalt, A. Raman, R. Quinones, K. Papariella; Duquesne University, Pittsburgh, PA.

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A. Sarasam, **S. V. Madihally**; Oklahoma State University, Stillwater, OK.

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G. A. Skarja¹, R. K. Ho¹, M. H. May¹, M. V. Sefton²; ¹Rimon Therapeutics Ltd., Toronto, ON, CANADA, ²University of Toronto, Toronto, ON, CANADA.

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Y. Yang¹, N. Oh¹, Y. Liu¹, M. Appleford¹, W. Chen¹, S. Oh¹, W. Haggard², J. Bumgardner², J. Ong¹; ¹University of Tennessee Health Science Center, Memphis, TN, ²University of Memphis, Memphis, TN.

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R. N. Yu¹, M. K. McHale², T. Shu¹, P. Jian¹, A. Gilbert¹, W. Jian¹, S. P. Lerner¹, J. L. West², **G. E. Amiel**¹; ¹Baylor College of Medicine, Houston, TX, ²Rice University, Houston, TX.

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