

C20

Title: Fabrication Of A Novel 3D-Printed Bone Marrow Bioreactor

Presenter: B. H. Jun¹, J. E. Torrez², D. J. Ross², M. O. Ishak¹, K. L. Davis-Anderson¹, J. F. Harris³; ¹Biochemistry and Biotechnology Group, Bioscience Division, Los Alamos National Laboratory, Los Alamos, NM, ²Engineered Materials Group, Material Science and Technology Division, Los Alamos National Laboratory, Los Alamos, NM, ³Chemistry and Applied Spectroscopy Group, Chemistry Division, Los Alamos National Laboratory, Los Alamos, NM.

Cardiovascular/Angiogenesis/Blood

C21

Title: A Fibronectin-derived, Vasoactive Peptide, P12, Promotes Both In Vitro And In Vivo Angiogenesis

Presenter: R. A. Clark¹, M. McTigue², M. G. Tonnesen²; ¹Dermatology and Biomedical Engineering, Stony Brook University, Stony Brook, NY, ²Dermatology, Stony Brook University, Stony Brook, NY.

C22

Title: Effects Of Culture Parameters On Vessel Network Morphology In Microfluidic Systems: A Practical Guide

Presenter: H. Shao, E. W. Young; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, CANADA.

C23

Title: Developments Of Cortical Spheroid Tissue Construct with Per-fusable Microvasculature Platform

Presenter: Y. Yun¹, T. Russell¹, Y. Li², Q. Dirar³; ¹NC A&T State University, Greensboro, NC, ²FAMU-FSU, Tallahassee, FL.

C25

Title: Develop A Small-diameter Vascular Graft With Amniotic Membrane

Presenter: B. Wang; Medical college of Wisconsin, Milwaukee, WI.

C26

Title: A Stable Parylene-based Conformal Coating Suppresses Thrombosis And Neointimal Hyperplasia On Implantable Vascular Devices

Presenter: D. Hao, J. Lin, R. Liu, C. Pivetti, K. Yamashiro, L. Schutzman, J. Sageshima, M. Kwong, N. Bahatyrevich, D. Farmer, M. Humphries, K. Lam, A. Panitch, A. Wang; University of California, Davis, Sacramento, CA.

C27

Title: Cardiac-specific Extracellular Matrix Scaffold For Cardiac Patch Engineering

Presenter: T. Chen¹, J. Zhang², T. J. Kamp³, F. Zhao¹; ¹Texas A&M University, College Station, TX, ²University of Wisconsin-Madison, Madison, WI.

Commercialization & Regulation

C28

Title: Tissuefab Ready-to-use Bioinks For Tissue Regeneration

Presenter: C. XU, V. Chu, E. V. Hainstock, M. E. Muroski, K. T. Dicker, G. Panambur; Polymer & Biomedical Materials R&D, MilliporeSigma, Milwaukee, WI.

Dental & Craniofacial

C29

Title: Production, Physicochemical And Biological Characterization Of Electrospun Composite Nanofibrous Scaffolds For Supporting The Repair And Regeneration Of Periodontal Tissues

Presenter: R. A. Macartney, G. A. Burke; School of Engineering, Ulster University, Belfast, UNITED KINGDOM.

C31

Title: Endodontic Therapy Of Immature Permanent Teeth With An Acellular Drug-free Hydrogel

Presenter: J. M. Taboas¹, H. L. Ray², M. Alipour¹, J. M. Khalil¹, S. Gopalaswamy¹, I. N. McNamara²; ¹Oral and Craniofacial Sciences, University of Pittsburgh, Pittsburgh, PA, ²Department of Endodontics, University of Pittsburgh, Pittsburgh, PA.

Imaging and Assessment

C32

Title: Minimally Invasive Robotic Tissue Palpation Device

Presenter: S. Mir, J. Chen, J. Kim; Biomedical Engineering department, Stevens Institute of Technology, Hoboken, NJ.

Musculoskeletal

C34

Title: Dysfunctional Macrophage Phenotype In Volumetric Muscle Loss (VML) Fibrosis

Presenter: R. Whitaker, K. Spiller, S. Sung, T. Tylek, G. Risser; School of Biomedical Engineering, Sciences and Health Systems, Drexel University, Philadelphia, PA.

C36

Title: Dissecting The Biological Effects And Modelling-derived Importance Of Micropattern And Cell Geometrical Features For Controlling Chondrogenic Vs. Osteoarthritic Inflammatory Phenotypes

Presenter: B. Rolauffs¹, J. C. Lauer¹, M. Selig¹, M. Voelker¹, M. C. Voelker¹, J. C. Lauer¹, J. Weitkamp², M. L. Hart³, B. Kurz³; ¹G.E.R.N. Research Center for Tissue Replacement, Regeneration & Neogenesis, Albert-Ludwigs-University of Freiburg, Freiburg, GERMANY, ²Dept. of Oral and Maxillofacial Surgery, University Medical Center Schleswig-Holstein Campus Kiel, Kiel, GERMANY, ³Institute of Anatomy, Christian Albrechts-University, Kiel, GERMANY.