

POSTER SESSION

C5

Title: Enhanced Cell Growth, Reproducibility, Throughput, And User Friendliness In Dynamic 3d Cell Culture Using A Pillar/Perfusion Plate Platform

Presenter: M. Lee¹, V. K. Lekkala¹, S. Kang¹, J. Liu¹, S. Shrestha¹, P. Acharya¹, P. Joshi², M. Zolfaghar¹, M. Lee¹, P. Jamdagneya¹, S. Pagnis¹, A. Kundi¹, S. Kabbur¹, Y. Yang¹; ¹Biomedical Engineering, University of North Texas, Denton, TX, ²Bioprinting Laboratories Inc, Denton, TX.

C6

Title: Novel Drug Tomatidine Increases Chemosensitivity Of Standard-of-care Gemcitabine In 3d Pancreatic Tumor Organoids

Presenter: S. Chakraborty¹, A. Skardal^{1,2}, D. Mukherjee^{3,4}, T. Mace^{4,5}; ¹Biomedical Engineering, The Ohio State University, Columbus, OH, ²Ohio State University Comprehensive Cancer Centre, Columbus, OH, ³Molecular Cellular and Developmental Biology, The Ohio State University, Columbus, OH, ⁴Gastro, Hepatology & Nutrition, The Ohio State University, Columbus, OH, ⁵Biomedical Engineering, The Ohio State University, Columbus, OH.

C7

Title: A New Organoid Culture Platform For Forskolin-induced Swelling Assays And Drug Screening Applications

Presenter: S. Cen, M. Hiatt, A. Eaves, S. Louis, E. Jarvis; STEMCELL Technologies Inc., Vancouver, BC, CANADA.

C8

Title: Towards A Generalizable 3D Engineered Model Of Human Tissue Fibrosis

Presenter: S. Shenk, L. Brown, S. Shook, J. Garlick; Diagnostic Sciences, Tufts University, Boston, MA.

C9

Title: Exploring Long-term Macroencapsulated Islet Viability, Function, And Composition

Presenter: S. A. Jackson, S. N. Patel, C. L. Stabler; Biomedical Engineering, University of Florida, Gainesville, FL.

C10

Title: TEER As A Readout Of Kidney Injury In A High-Throughput Microfluidic Human Kidney-on-a-chip

Presenter: E. M. Shaughnessey¹, S. H. Kann², H. Azizgolshani², J. L. Charest³, E. M. Vedula⁴;

¹Biomedical Engineering, Tufts University, Medford, MA, ²Bioengineering, Draper, Cambridge, MA, ³Biogen, Cambridge, MA.

C11

Title: 3D Printed Hydrogels For The Generation Of Implantable Large Cell-laden Tissues For Vital Organ Replacement

Presenter: T. J. Lieberthal¹, T. Sahakyan¹, N. Szabo-Wexler², M. J. Hancock³, A. P. Spann³, C. M. Neville⁴, J. P. Vacanti^{2,3}; ¹3D BioLabs, Chadds Ford, PA, ²3D BioLabs, LLC, Chadds Ford, PA, ³Veryst Engineering, LLC, Needham, MA, ⁴Center for Regenerative Medicine, Massachusetts General Hospital, Boston, MA, ⁵Department of Surgery, Massachusetts General Hospital, Boston, MA.

C12

Title: Cardiotoxicity Study On A 3D Heart-on-Chip Platform By Evaluating The Effect Of Compounds On The QT Alterations And The Pro-Arrhythmic Response

Presenter: F. Lozano-Juan^{1,2}, R. Visone^{1,2}, S. Marzorati³, M. Rivolta⁴, E. Pesenti⁵, A. Redaelli¹, R. Sassi¹, M. Rasponi¹, P. Occhetta^{1,2}; ¹Department of Electronics, Information and Bioengineering, Politecnico di Milano, Milano, ITALY, ²BiomimX Srl., Milano, ITALY, ³Accelera Srl., Milano, ITALY, ⁴Department of Computer Science, Università degli Studi di Milano, Milano, ITALY.

C13

Title: Oxygen Sensing In A High-throughput Microfluidic Human Kidney-on-chip For Assessment Of Drug-induced Kidney Injury

Presenter: S. H. Kann^{1,2}, E. M. Shaughnessey^{3,4}, J. L. Charest⁴, X. Zhang¹, E. M. Vedula²; ¹Boston University, Boston, MA, ²Draper, Cambridge, MA, ³Tufts University, Medford, MA, ⁴Biogen Inc., Cambridge, MA.

C14

Title: Three-dimensional Alzheimer's Disease's Spheroid-grafted Neurovascular Unit

Presenter: Y. Yun, B. Khader, C. Johnson, S. Byrne, D. Kim, S. Kwak, S. Kwak; NC A&T State University, Greensboro, NC.

C15

Title: Pancreatic Slices On A Chip As A Tool For Type 1 Diabetes Research

Presenter: C. Alver¹, E. Warrner¹, S. Alvarez-Cubela², R. Pastor², E. Hutchison³, M. Viso¹, G. Vitale¹, J. Dominguez-Bendala², A. Agarwal¹; ¹Biomedical Engineering, University of Miami, Coral Gables, FL, ²Diabetes Research Institute, University of Miami Miller School of Medicine, Miami, FL.

C16

Title: Developing A Microfluidic System For Type-1 Diabetes Testing

Presenter: M. Viso, B. Suthar, D. Oliver, A. Agarwal; Biomedical Engineering, University of Miami, Coral Gables, FL.

C17

Title: Development Of A Human Mesofluidic Gut Model For Studying Interactions Of Lumen Contents With Mucus Barrier

Presenter: C. Wang¹, H. S. Oberoi², M. Yu², D. Law², T. Kassis³, R. L. Carrier⁴; ¹Bioengineering, Northeastern University, Boston, MA, ²NCE-Formulation Sciences, Abbvie Inc., North Chicago, IL, ³Biological Engineering, Massachusetts Institute of Technology, Boston, MA, ⁴Chemical Engineering, Northeastern University, Boston, MA.

C18

Title: The Effect Of Heterotypic Interactions On Cardiac Microtissue Function

Presenter: T. Hookway, K. Butler, S. Ahmed; Biomedical Engineering, Binghamton University, SUNY, Binghamton, NY.

C19

Title: Engineering Cerebral Organoids With Functional CNS Barriers System

Presenter: C. Xu, C. Lee, A. Alameri, C. Quek, K. W. Leong; Biomedical Engineering, Columbia University, New York, NY.