| | | | | JUNE 29th 2023 |
|-------------|-------------|----------------------------------|---|--|
| Poster | | Presentation | | |
| board | Abstract ID | | Presenter Name | Title |
| number 1 | 488 | 10:00-11:30 am | Elizabeth M. Boazak | Characterization of reproducibility and biological variability in a stem-cell derived human intestinal epithelium model for applications in inflammation. |
| 2 | 490 | 4:30 - 6:00 pm | | Lung-organoid-infection models for preclinical testing of antiviral T-cells |
| 3 | 491 | 10:00-11:30 am | | Bioproduction of organoids and tumoroids in microbeads of human and animal extracellular matrices Implementation of customized 2D-to-3D microelectrode array designs: optimization of passivation, electrode shape and methods for performance |
| 4 | 493 | 4:30 - 6:00 pm | | assessment |
| 5 6 | 494 496 | 10:00-11:30 am 4:30 - 6:00 pm | | Three Human-Derived Hydrogels developed to support stem cell derived Micro-physiological systems High-definition microelectrode arrays with scalable, integrated microfluidics in multi-well format for drug screening in a heart-on-a-chip application |
| 7 | 498 | 10:00-11:30 am | | Compartmentalized culture of a dorsal root ganglia on a soft thermoplastic elastomer chip: a proof of concept of an alternative to PDMS material for |
| | | | | neurofluidics |
| 8 | 499 500 | 4:30 - 6:00 pm 10:00-11:30 am | - | Metabolic and Proteomic Profiling of Organophosphate Chemical Warfare Agent Exposure on CNBio Human Liver-on-a-Chip An ex vivo mini-ovary provides a platform for studying ovarian biology, disease, toxicology |
| 10 | 501 | 4:30 - 6:00 pm | Zhongwang Li | Automated Tool for Renal Biopsy Diagnosis |
| 11 12 | 503 504 | 10:00-11:30 am | Elena Müller Chidubem Onyeagoro | A surface-tension self-pumping microfluidic chip for suspension cell culture Comparative analysis of vascular transcriptomics in 2D, transwells, and organ-on-a-chip models |
| 13 | 505 | 10:00-11:30 am | | Cocultivation of liver spheroids and human proximal tubule renal epithelium cells in a perfusable system |
| 14 | 506 | | Meng-Chun Hsu | A Modular Barrier Tissue Platform with On-Demand Fluid Flow and TEER Measurement Capabilities |
| 15 | 507 | 10:00-11:30 am | • | Topologically constrained in-vitro networks express plasticity effects when stimulated electrically Increasing predictability of antibody-triggered receptor mediated transcytosis and neurotoxicity of CAR-T based therapy with a novel Blood Brain Barrier-on- |
| 16 | 508 | 4:30 - 6:00 pm | | Chip Model |
| 17 18 | 509 510 | | morgane couchet Cátia F. Monteiro | A hybrid silicon and polymer chip for 3D vascularized human beta-pancreatic model development A tumor-on-a-chip incorporating human-based hydrogels for easy assessment of tumor invasion and metastasis |
| 19 | 510 | | Alessandra Venz | A tumor-on-a-cnip incorporating numan-based nydrogeis for easy assessment or tumor invasion and metastasis High spatiotemporal resolution impedance mapping of Caco-2 epithelial barriers on CMOS-MEA chips |
| 20 | 512 | 4:30 - 6:00 pm | Wuyang Gao | Lung on a chip with soft ECM tubular structures |
| 21 22 | 513 515 | 10:00-11:30 am 4:30 - 6:00 pm | Elizabeth Coln Alex Rittenhouse | Design and Fabrication of a Piezoresistive Microcantilever Strain Sensor for Measurement of Contractile Muscle Force Generation Addressing Genetic Backgrounds and Shared Phenotypes in Autism Spectrum Disorder |
| 23 | 516 | 10:00-11:30 am | | Introduction of circulating factors to the µSiM-BBB for in vitro studies of sepsis-associated brain injury |
| 24 | 517 | | Seonghyuk Park | Integrated microfluidic platform for tumor spheroid-induced 3D angiogenesis model |
| 25 26 | 519 520 | 10:00-11:30 am 4:30 - 6:00 pm | | Implementation of a Human Cell-Based Malaria-on-a-Chip Phenotypic Disease Model for Drug Efficacy Evaluation Functional neuronal platform to investigate glial-neuron contributions towards AD in a hiPSC derived triculture system |
| 27 | 521 | | Margaret Magdesian | Human Neuron-on-a-chip platform to automate the screening of compounds targeting Alzheimer's Disease |
| 28 | 522 524 | 4:30 - 6:00 pm | | Industry Standards to Guide Mass Spectrometry Spatial Techniques for PKPD modeling for Organ-on-a-Chip Research |
| 29 | | 10:00-11:30 am | | Cross-Species Biomarker Identification for Drug Induced Vascular Injury Using a High-Throughput Organ-on-Chip Platform Investigation of the Efficacy and Off-Target Toxicity of both Acute and Chronic Opioid Overdose and Naloxone Recovery in Multiorgan Human-on-a-Chip |
| 30 | 525 | • | Stephanie Lang | Systems |
| 31 32 | 526 527 | | Hannah Hanson Christopher Hughes | Application of Flow Cytometry for Plasmodium falciparum Quantification for a Malaria-on-a-chip Model Flow-induced ACE2 expression allows for SARS-CoV-2 infection of endothelial cells in a vascularized microphysiological system |
| 33 | 529 | 10:00-11:30 am | · | An MPS model to study the effect of infinitesimally small shear stress on the morphology and performance of a hybrid proximal tubule microtissue |
| 34 35 | 531 532 | | Leah Susanne Mönkemöller | Building blocks for cognition-in-a-dish: Brain MPS, electrophysiology and expression of molecular machinery of learning and memory |
| 36 | 532 | 10:00-11:30 am 4:30 - 6:00 pm | | ASTEROIDS: Coupling Organoid Culture with a Multicellular MPS using a Dynamic and Novel Platform 3D Neural interfaces on Chip |
| 37 | 534 | 10:00-11:30 am | Chiao Hwei Lee | Cell shape dominates over physiological substrate stiffness by limiting nuclear localisation of the fibrogenesis gatekeeper, YAP/TAZ |
| 38 | 535 | 4:30 - 6:00 pm | Abigail Koppes | Microphysiological Systems for Studying Enteric Neuron - Epithelial Interactions Using Weighted Gene Correlation Networks Analysis to Explore Similarities and Differences in Genetic Regulatory Netoworks in Glioma, iPSC Brain |
| 39 | 536 | 10:00-11:30 am | Alexandra Maertens | Organoids, and CNS-Derived Immortalized Cell Lines |
| 40 | 537 | | Ravikumar Krishnamurthy | Pancreatic Islet (PANIS) Microphysiological System for Modeling Type 2 Diabetes |
| 41 42 | 539 540 | 10:00-11:30 am 4:30 - 6:00 pm | Sriram Bharath Gugulothu | Cellular co-culture rather than 3D environment improves cardiomyocyte functionality in gellan gum-gelatin hydrogel 3D Bioprinted vascularized tumor model for triple-negative breast cancer disease modeling |
| 43 | 541 | 10:00-11:30 am | | Applicability assessment of human immortalized cell-based blood-brain barrier models for characterization of brain permeability of cyclic peptides |
| 44 | 542 | 4:30 - 6:00 pm | Julio Aleman | Physical coupling of a vascularized human liver acinus microphysiological system (vLAMPS) and Pancreatic Islet microphysiological system (PANIS) to recapitulate progressive hepatic insulin resistance and the systematic causal link to type 2 diabetes (T2D) |
| 45 | 544 | 10:00-11:30 am | Yoshikazu Kameda | Modeling the interaction between tumor spheroids and vasculature using on-chip vascular bed platform |
| 46 | 545 | | Fikret Emre Kapucu | Human cortical neuronal networks in microelectrode embedded microphysiological system to study functional alterations during alpha-synuclein |
| 47 | 546 | 10:00-11:30 am | · | aggregation and propagation as model for Parkinson's disease A high-throughput, 28-day, microfluidic model of human gingival tissue inflammation and recovery |
| 48 | 547 | 4:30 - 6:00 pm | Siiri Suominen | Liver-on-a-chip: Development of patient-specific liver models utilizing iPSCs and novel microfluidic chip devices |
| 49 50 | 548 549 | 10:00-11:30 am 4:30 - 6:00 pm | Gowri Vishal Gupta Kolluru Ricky Rayer | Lung-mimicking hydrogel culture systems to study host-pathogen interaction and drug efficacy in tuberculosis A predictive multi-organ-chip platform for cancer precision medicine using automated high-content substance testing |
| 51 | 553 | | Claudia Olaizaola | Novel fabrication strategies to reduce the presence of inert materials inside microphysiological systems |
| 52 | 554 | | Christopher Hughes | The Vascularized Micro-Tumor (VMT): a fully human Microphysiological System platform for testing multiple immuno-oncology therapies |
| 53 54 | 556 557 | | Shruthy Kuttappan Sandra González-Lana | Bioinspired Microfluidic Chip for Vascularized Multi-Niche Bone Marrow Structural and functional impact of co-culturing iPSC-CMs and HCAEC within microfluidic devices exposed to mechanical and electrical stimuli. |
| 55 | 558 | 10:00-11:30 am | Yuji Takata | Monitoring drug-induced nephrotoxicity modified by cell polarity in renal proximal tubule epithelial tissue with an impedance measurement system |
| 56 57 | 559 | | María García-Díaz | Bioprinted hydrogel-based microphysiological systems recapitulating the cellular crosstalk in tissue barriers |
| 57 58 | 561 562 | 10:00-11:30 am 4:30 - 6:00 pm | Kaveena Autar | Utilizing Long-Term Potentiation in iPSC-Cortical Neurons to Investigate CBD and Echinacea as Treatments for Chronic Stress |
| 59 | 563 | | Gowri Vishal Gupta Kolluru | Lung-mimicking hydrogel culture systems to study host-pathogen interaction and drug efficacy in tuberculosis |
| 60 | 564 | 4:30 - 6:00 pm | Swetha Kannan | ECG findings and clinical presentations of myocardial ischemia reported among patients with cardiac metastasis from lung malignancies: A Narrative Review |
| 61 | 565 | | Matthieu Lépine | Bioengineering of human vascular networks with controlled geometry using DLP bioprinting |
| 62 | 566 | | Yiannis Paschalidis | Digital Light Bioprinting of an in vitro self-renewing Corneal Limbal Epithelial model |
| 63 64 | 570 571 | 10:00-11:30 am 4:30 - 6:00 pm | Alessandro Bentivogli Elvira Weber | Highly biomimetic 3D bioprinted tubular small intestine model leads to in vivo-like differentiation of human adult stem cell-derived organoids How adipoids can help us in immune metabolism research. |
| 65 | 573 | 10:00-11:30 am | Caroline Archer | Application of advanced in vitro models for mechanistic translational understanding of cardiovascular liabilities. |
| 66 67 | 577 578 | 4:30 - 6:00 pm | Hannah Graf Eva-Maria Dehne | Connecting Organs, a standardized approach to multi-organ chip connections Towards a proximal tubule microphysiological system for antisense oligonucleotide safety testing |
| 68 | 578 | | Marie-Line Cosnier | Evaluation of photobiomodulation effects on vascular network using physiological model and vascular network on chip |
| 69 | 580 | 10:00-11:30 am | 6 | |
| 70 71 | 585 586 | 4:30 - 6:00 pm 10:00-11:30 am | Svenja Wingerter Ning Zhang | Virotherapy in vitro – Development of an organ-on-chip model for treatment of tumoroids with oncolytic viruses and chemotherapy Differentiation of iPSCs into neocortical neurons in microphysiological environment |
| 72 | 589 | 4:30 - 6:00 pm | Floriana Burgio | Establishment of a dynamic in vitro human iPSC-derived blood-brain barrier for investigating the passage of biologics. |
| 73 | 591 | 10:00-11:30 am | Zeyu Luo | Cryo(bio)printing for Anisotropic Tissue Manufacturing |

| 74 | 594 | 4:30 - 6:00 pm | Olivier Frey | A deep-learning-assisted image analysis and a multiparametric biochemical quantification in human 3D model of non-alcoholic steatohepatitis for high-throughput drug discovery |
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| 75 | 597 | 10:00-11:30 am | Yan Zu | Lung-on-a-chip with an IOS-PU film to explore the effect of mechanical stretch on cell deformation and proliferation of alveolar epithelial cells |
| 76 | 598 | 4:30 - 6:00 pm | | PERCEPT: a Parkinson's disEase bRain-Chip modEl to unveil Polyphenol meTabolites potential |
| 77 | 599 | 10:00-11:30 am | Ikuro Suzuki | An MPS device for in vitro peripheral neurotoxicity assessment based on morphological and electrophysiological characteristics |
| 78 | 601 | 4:30 - 6:00 pm | Katharina Schlünder | Microphysiological pancreas-on-chip platform with integrated sensors to model endocrine function and metabolism |
| 79 | 602 | 10:00-11:30 am | Deepa Chaturvedi | Modelling of Human Microphysiological Skin System for Preclinical Evaluation of Drug Molecules. |
| 80 | 603 | | Yanuar Dwi Putra Limasale | Engineering glycosaminoglycan-based hydrogels to modulate microvascular network formation in vitro |
| 81 | 604 | 10:00-11:30 am | | Nanoparticles Stokes radius assessment through permeability coefficient determination within a new stratified epithelium on chip model. |
| 82 | 605 | | Annika Ahtiainen | Culturing topologically controlled neuron and neuron-astrocyte networks on microelectrode arrays. |
| 83 | 606 | | Ana Carolina Figueira | In vitro oral and topic absorption toxicity test standardization using 3D cell cultures and microfluidic systems. |
| 84 | 607 | 4:30 - 6:00 pm | | Use of a 3D-in vitro model for the assessment of liver metabolism related to neurotoxicity of occupationally relevant chemicals |
| 85 | 608 | | Michelle Brouwer | Antigen specific antibody responses in a human lymph node-on-a-chip for drug development research |
| 86 | 609 | | Sandra Tenreiro | 3D human retinal organoid model for the study of early diabetic retinopathy |
| 87 88 | 610 611 | 4:30 - 6:00 pm | Carlos Sobejano | Development and validation of an airway-infection-on-a-chip microfluidic platform |
| 89 | 612 | | Konrad Schmidt | The application of ImmuLUNGTM in inhalation safety assessments and organ-on-chip platforms. A multi-compartment lung-on-chip model to study the (patho)physiological relevance of biological hydrogels |
| 90 | 613 | | Stavroula Sampani | Microphysiological systems in biomedical research |
| 91 | 614 | 10:00-11:30 am | | SARS-CoV-2 variant infection differences between static and microphysiological system models of the human lung |
| 92 | 616 | | Gianluca Ciardelli | Gelatin methacryloyl hydrogels: a versatile platform to recreate the 3D microenvironment of native tissues in vitro |
| 93 | 617 | | Gianluca Ciardelli | Gelatin methacryloyl hydrogels: a versatile platform to recreate the 3D microenvironment of native tissues in vitro |
| 94 | 618 | | Rudra Bhowmick | Development and characterization of patient derived organoids from human breast tissue |
| 95 | 619 | 10:00-11:30 am | Anna Laptii | Biofabrication of a glomerular 3D model by mimicking its functional core components |
| | | | | A cell tetraculture model combined with an air-liquid interface exposure system, as easy-to-use alternative technology for in vitro hazard assessment of |
| 96 | 620 | 4:30 - 6:00 pm | Elisa ivioschini | respiratory sensitizers |
| 97 | 622 | 10:00-11:30 am | Brady Lundin | Modeling Clinically Relevant Neural Tube Defect Risk using RosetteArrayTM Technology |
| 98 | 624 | 4:30 - 6:00 pm | | |
| 99 | 625 | | Michelle D Cherne | Human Gastric Extracellular Matrix as a Matrigel Alternative for Gastric Organoid Culture |
| 100 | 626 | 4:30 - 6:00 pm | | A new oxygen-permeable material enabling cellular aerobic respiration both in static and perfusion MPS |
| 101 | 627 | 10:00-11:30 am | • | Discovery of Novel Anti-cancer Components from Celastrol Derivatives Based Patient-derived Colorectal Cancer Organoids |
| 102 | 628 | 4:30 - 6:00 pm | | Endothelialization of bifurcating microchannels for 3D tissue models |
| 103 | 629 | 10:00-11:30 am | | Impact of the microfluidic systems on the 2D and 3D cell cultures |
| 104 | 631 | | Francesca Romana Brugnoli | Microfluidic system for automated cellular perfusion: screening compounds on monoamine transporters Engineered basement amount of the properties of the properties of the properties and the properties are properties of the properties of the properties of the properties of the properties and the properties of the prop |
| 105 | 632 | 10:00-11:30 am | | Engineered basement membrane enhancing barrier functions of human ips-derived blood-brain barrier model |
| 106 107 | 633 634 | 4:30 - 6:00 pm | Jaeseung Youn Hiroyuki Mizuguchi | Epithelial wrinkling and wrinkle-to-fold transition in vitro Development of organoid-derived hepatocytes and enterocytes from human primary cells, biopsy, and iPS cells for pharmaceutical research |
| 108 | 635 | 4:30 - 6:00 pm | | Development of a testis tissue culture device for drug toxicity test |
| 109 | 636 | 10:00-11:30 am | | Tumor-on-chip to evaluate CAR-T-cell based cancer immunotherapy efficacy in vitro |
| 110 | 637 | | Marzena Walaszczyk | Bioengineering investigation of multiple Organ-on-chip platforms with an advanced 3D manufacturing process in the field of translational research |
| 111 | 638 | 10:00-11:30 am | | Electronic Blood Vessels Based on Microfluidics |
| 112 | 639 | 4:30 - 6:00 pm | | High Throughput Manufacturing of Self-organizing Organoids with Good Uniformity |
| 113 | 640 | | Enrico Cavarzerani | 3D dynamic cultures of High-Grade Serous Ovarian Cancer organoids to model innovative and standard therapies |
| 114 | 641 | 4:30 - 6:00 pm | Jingyu Li | Application of hiPSC Derived Cardiac Organoids in Drug Evaluation by Electrophysiological Test |
| 115 | 643 | 10:00-11:30 am | Bo Tang | A barrier-on-chip platform with integrated impedance measurement generated by a novel fast prototyping approach |
| 116 | 644 | 4:30 - 6:00 pm | Theano Tsikari | Isogenic iPSC-based 3D vessel-on-chip model of CADASIL disease reveals vascular smooth muscle cell phenotypic switching upon heterocellular interaction |
| | | | | |
| 117 | 647 | | Jan Lichtenberg | Translation of DILI from Regulatory Animals to Human Using 3D Liver Microtissues – Results of the International X-Species DILI Validation Consortium |
| 118 | 648 | | Beren Atac Wagegg | The ADME-Chip: Studying different application routes on a PB/PK compliant preclinical tool |
| 119 120 | 649 | 10:00-11:30 am | | Cantilever microelectrodes for the monitoring of inner electrical activity of cerebral organoids |
| 121 | 650 651 | 4:30 - 6:00 pm 10:00-11:30 am | <u> </u> | Fabrication of Human organioid and organ-on-a-chip based on innervation |
| 122 | 652 | | Sebastien Mosser | SmartHeart - a novel 3D in vitro assay for improved assessment of cardiac drug efficacy and toxicity Vascularized organ-on-chip models for increased biological relevance on a high-throughput platform |
| 123 | 653 | 10:00-11:30 am | | A Human Bone/Bone-Marrow-on-a-Chip Approach for in vitro culture of human bone marrow and benchmark against clinical reality |
| 124 | 654 | 4:30 - 6:00 pm | | Dermopapilla: a self-renewing mini-organ reproduced in 3D scaffold free spheroids |
| 125 | 655 | | Nuria Gines Rodriguez | High-speed volumetric bioprinting of optically-tuned bioresins into liver organoid-laden microphysiological systems |
| 126 | 656 | 4:30 - 6:00 pm | | Automation for organoid assays – An integrated system with high-content imaging |
| 127 | 657 | 10:00-11:30 am | | Copper ions monitoring in cell culture media via anodic stripping voltammetry: from Transwell® to organ-on-chip systems |
| | | | | Development of a Novel Human Microphysiological System-Based SELEX Method for Robust Identification of Brain-Targeting Aptamers for CNS Drug |
| 128 | 658 | • | Jeong-Won Choi | Delivery |
| 129 | 659 | 10:00-11:30 am | | Evaluation of chimeric antigen receptor (CAR)-T cell recruitment and efficacy on an Organ-Chip model system |
| 130 | 661 | | Daniela Marques | PERIPHERAL INFLAMMATION MICROFLUIDIC MODEL TO DISCLOSE POLYPHENOLS METABOLITES POTENTIAL |
| 131 | 662 | | Alan Raj Jeffrey Rajendran | Self-organisation of human hepatocytes into hepatic cords on a radially perfused microfluidic device |
| 132 | 663 | 4:30 - 6:00 pm | | A human Bone/Bone-Marrow-on-a-Chip system for preclinical investigation of new therapeutic approaches for Autosomal Recessive Osteopetrosis |
| 133 134 | 664 665 | 10:00-11:30 am | Deepshika Arasu | Extracellular vesicles as a next-generation drug delivery platform in a more physiological MPS based microenvironment Laser-Assisted Bioprinting of iPSCs generates embryoid bodies |
| 135 | 667 | | Mireille Chevallet | Towards the development of a functional hepato-biliairy model to monitor bile canaliculi formation |
| 136 | 668 | 4:30 - 6:00 pm | | Multi-Sensor Origami Platform: Custom 3D Sensing |
| 137 | 669 | 10:00-11:30 am | | HiPSC-derived BrainSpheres mimic neuropathological phenotypes of the Cockayne Syndrome B in vitro |
| 138 | 670 | 4:30 - 6:00 pm | | Machine learning analysis of oxygen amplifies the physiologically-relevance and translational capacity of vascularized microphysiological systems |
| 139 | 671 | 10:00-11:30 am | | AngioMT: An in silico platform for digital sensing of oxygen transport through vascularized organ-chips and organoids |
| 140 | 673 | 4:30 - 6:00 pm | | Integrative cancer biology-on-chip: Proangiogenic pathophysiology of platelets in microcirculation modeled in a tumor microenvironment-chip |
| | | | Evita van de Steeg | Intestine-on-chip: establishment of human intestinal organoids-on-chip for drug absorption & metabolism studies |
| 141 | 674 | 10:00-11:30 am | - | Design of an electrical stimulation platform for the in vitro maturation of human adult cardiomyocytes |
| 141 142 | 674 675 | | Gerardina Ruocco | besign of an electrical standard partient for the in vitro mataration of namen additional parties |
| | | | | Preventing PDMS Drug Absorption through incorporation of a PDMS-PEG Block copolymer and Drug Pretreatment |
| 142 | 675 | 4:30 - 6:00 pm | Devin Mair | |
| 142 143 144 | 675 676 677 | 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm | Devin Mair Yoni Baert | Preventing PDMS Drug Absorption through incorporation of a PDMS-PEG Block copolymer and Drug Pretreatment Completion of meiosis in mouse testicular organoids with improved germ cell survival, steroidogenesis and restoration of a tissue-specific architecture |
| 142 143 144 145 | 675 676 677 678 | 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am | Devin Mair Yoni Baert Patrizia Tornabene | Preventing PDMS Drug Absorption through incorporation of a PDMS-PEG Block copolymer and Drug Pretreatment Completion of meiosis in mouse testicular organoids with improved germ cell survival, steroidogenesis and restoration of a tissue-specific architecture Improved in vitro models for studying diabetes using stem cells and a user-friendly microphysiological system |
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| 142 143 144 145 146 147 | 675 676 677 678 679 681 682 | 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm | Devin Mair Yoni Baert Patrizia Tornabene Lowry Curley Mark Miedel Giulia Grimaldi | Preventing PDMS Drug Absorption through incorporation of a PDMS-PEG Block copolymer and Drug Pretreatment Completion of meiosis in mouse testicular organoids with improved germ cell survival, steroidogenesis and restoration of a tissue-specific architecture Improved in vitro models for studying diabetes using stem cells and a user-friendly microphysiological system A High-Throughput Electrophysiology Platform for Compound Screening with a Peripheral Nerve Microphysiological System A Patient-Derived iPSC Liver Acinus Microphysiology System as an Innovative Precision Medicine Platform for Optimizing Clinical Trial Design for Nonalcoholic Fatty Liver Disease (NAFLD) Developing Ductal Tissues on a Chip |
| 142 143 144 145 146 147 148 149 | 675 676 677 678 679 681 682 683 | 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am | Devin Mair Yoni Baert Patrizia Tornabene Lowry Curley Mark Miedel Giulia Grimaldi Alexis BERNATETS | Preventing PDMS Drug Absorption through incorporation of a PDMS-PEG Block copolymer and Drug Pretreatment Completion of meiosis in mouse testicular organoids with improved germ cell survival, steroidogenesis and restoration of a tissue-specific architecture Improved in vitro models for studying diabetes using stem cells and a user-friendly microphysiological system A High-Throughput Electrophysiology Platform for Compound Screening with a Peripheral Nerve Microphysiological System A Patient-Derived iPSC Liver Acinus Microphysiology System as an Innovative Precision Medicine Platform for Optimizing Clinical Trial Design for Nonalcoholic Fatty Liver Disease (NAFLD) Developing Ductal Tissues on a Chip Renewable oxygen electrode sensor integration within liver organoïd-on-chip microfluidic device |
| 142 143 144 145 146 147 148 149 | 675 676 677 678 679 681 682 683 685 | 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm | Devin Mair Yoni Baert Patrizia Tornabene Lowry Curley Mark Miedel Giulia Grimaldi Alexis BERNATETS Charlotte Schlett | Preventing PDMS Drug Absorption through incorporation of a PDMS-PEG Block copolymer and Drug Pretreatment Completion of meiosis in mouse testicular organoids with improved germ cell survival, steroidogenesis and restoration of a tissue-specific architecture Improved in vitro models for studying diabetes using stem cells and a user-friendly microphysiological system A High-Throughput Electrophysiology Platform for Compound Screening with a Peripheral Nerve Microphysiological System A Patient-Derived iPSC Liver Acinus Microphysiology System as an Innovative Precision Medicine Platform for Optimizing Clinical Trial Design for Nonalcoholic Fatty Liver Disease (NAFLD) Developing Ductal Tissues on a Chip Renewable oxygen electrode sensor integration within liver organoïd-on-chip microfluidic device Understanding the neurodevelopmental toxicity of heavy metals through extracellular RNA communication and synaptogenesis |
| 142 143 144 145 146 147 148 149 150 | 675 676 677 678 679 681 682 683 685 686 | 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am | Devin Mair Yoni Baert Patrizia Tornabene Lowry Curley Mark Miedel Giulia Grimaldi Alexis BERNATETS Charlotte Schlett Thom van der Made | Preventing PDMS Drug Absorption through incorporation of a PDMS-PEG Block copolymer and Drug Pretreatment Completion of meiosis in mouse testicular organoids with improved germ cell survival, steroidogenesis and restoration of a tissue-specific architecture Improved in vitro models for studying diabetes using stem cells and a user-friendly microphysiological system A High-Throughput Electrophysiology Platform for Compound Screening with a Peripheral Nerve Microphysiological System A Patient-Derived iPSC Liver Acinus Microphysiology System as an Innovative Precision Medicine Platform for Optimizing Clinical Trial Design for Nonalcoholic Fatty Liver Disease (NAFLD) Developing Ductal Tissues on a Chip Renewable oxygen electrode sensor integration within liver organoïd-on-chip microfluidic device Understanding the neurodevelopmental toxicity of heavy metals through extracellular RNA communication and synaptogenesis Optimization of experimental conditions to culture microphysiological kidney tubules in FCS-free media |
| 142 143 144 145 146 147 148 149 | 675 676 677 678 679 681 682 683 685 | 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am 4:30 - 6:00 pm 10:00-11:30 am | Devin Mair Yoni Baert Patrizia Tornabene Lowry Curley Mark Miedel Giulia Grimaldi Alexis BERNATETS Charlotte Schlett Thom van der Made | Preventing PDMS Drug Absorption through incorporation of a PDMS-PEG Block copolymer and Drug Pretreatment Completion of meiosis in mouse testicular organoids with improved germ cell survival, steroidogenesis and restoration of a tissue-specific architecture Improved in vitro models for studying diabetes using stem cells and a user-friendly microphysiological system A High-Throughput Electrophysiology Platform for Compound Screening with a Peripheral Nerve Microphysiological System A Patient-Derived iPSC Liver Acinus Microphysiology System as an Innovative Precision Medicine Platform for Optimizing Clinical Trial Design for Nonalcoholic Fatty Liver Disease (NAFLD) Developing Ductal Tissues on a Chip Renewable oxygen electrode sensor integration within liver organoïd-on-chip microfluidic device Understanding the neurodevelopmental toxicity of heavy metals through extracellular RNA communication and synaptogenesis |

| 154 | 689 | 4:30 - 6:00 pm | Mairi Sandison | Microwell arrays for long-term confinement and single-cell tracking of phenotypic heterogeneity in vascular smooth muscle populations |
|------------|------------|----------------|-------------------|--|
| 155 | 691 | | Verena Schwach | Human Engineered Heart Model for Risk Assessment of Cardiac Arrhythmia |
| 156 | 692 | | Lorenzo Coppadoro | Development and validation of a new versatile and scalable microphysiological device for compartmentalized tissue barriers. |
| 157 | 693 | 10:00-11:30 am | | Development of an automated laser photoablation setup for the mimicry of a peristaltic motion of the gut |
| 158 | 694 | | Jennifer Harder | Modeling Inflammatory Pathways Associated with Proteinuric Kidney Disease using Kidney Organoids |
| 159 | 695 | 10:00-11:30 am | | Multi-Organ Micro-Physiological System Mimics Glycemic Control Mechanics in Human Pancreas-Liver Microfluidic Co-Culture |
| 160 | 697 | 4:30 - 6:00 pm | | Facilitating combination therapy studies in patient-derived 3D tumour models |
| 161 | 698 | 10:00-11:30 am | | Highly permeable nanofibrous microwell array for generation of uniform and mature kidney organoids |
| 162 | 700 | | Simone Perottoni | Multiorgan-on-a-plate microphysiologic platform based on a modular organ-on-a-chip device to address the microbiota-gut-brain axis |
| 163 | 702 | 10:00-11:30 am | | Respiratory Syncytial Virus Infection of Peripheral Nerve and Spinal Cord Immunocytes Induces Delayed Transient Peripheral Nerve Hyperreactivity and |
| 464 | 702 | 4:20 6:00 | Karda Balland | Persistant Spinal Cord Infection |
| 164 165 | 703 705 | 4:30 - 6:00 pm | | Human Microphysiological Model of Afferent Nociceptive Signaling |
| 166 | 705 | 4:30 - 6:00 pm | Hajime Miyashita | Development of Cell Culture Environment Sustaining MPS (CCES-MPS) Integrated with a Dialysis Membrane Development of Kinetic-pump integrated microfluidic plate (KIM-Plate) for commercialization |
| 167 | 708 | 10:00-11:30 am | | Leveragine population of model in silico approach for robust islet tissue development in microphysiological systems |
| 168 | 708 | | Baboucarr Lowe | Euverlaging population or incolor in since approach not robust isset ussue development in intercophysiological systems. Durable engineered extracellular matrices with tunable biophysical and biochemical properties for long-term microfluidic culture. |
| 169 | 715 | | Daniel Nishizawa | Development of a Culture Medium Perfusion Platform Improving Usability of Microphysiological Systems |
| 170 | 716 | 4:30 - 6:00 pm | | Customizable gut-on-a-chip microsystems with enzymatic digestion for food and drug studies |
| 171 | 717 | | Kristina Bartmann | A human iPSC-based in vitro neural network formation assay to investigate neurodevelopmental toxicity of pesticides |
| 172 | 718 | 4:30 - 6:00 pm | | Systemic & High-Throughput: Liquid Microphysiological Systems |
| 173 | 719 | 10:00-11:30 am | | Soldier-on-a-chip: interrogating the effects of chemical and biological threat agent exposure using a multi-organ microphysiological system |
| 174 | 720 | | Monieb Ahmed | Towards a microfluidic approach for assessing effects of spatiotemporal oxygen fluctuations in the tumour microenvironment |
| 175 | 721 | | Alexander Kinev | 3D Microvascular Inflammation Model Incorporating Human Genetic Diversity Amenable for Microphysiological Systems |
| 176 | 723 | 4:30 - 6:00 pm | | Development of Automated Microphysiological Systems and Al-Based Algorithms for Drug Evaluation. |
| 177 | 724 | 10:00-11:30 am | | Application of adipose-derived mesenchymal stem cell-derived small extracellular vesicles for bladder reconstruction |
| 178 | 727 | 4:30 - 6:00 pm | • | Oxygen-sensitive 3D cell culture systems – a tool for 3D mito stress tests. |
| 179 | 728 | 10:00-11:30 am | Chiara Ghezzi | In vitro 3D human gingival tissue model to study oral microbiome interactions |
| 180 | 733 | 4:30 - 6:00 pm | Marc Ferrer | Functional bioengineered 3D neural models with neurovasculature to study neurological diseases and drug screening |
| 181 | 735 | 10:00-11:30 am | Francesca Pisapia | Development of highly differentiated human primary proximal tubule MPS model (aProximate MPS FlowTM) |
| 182 | 737 | 4:30 - 6:00 pm | Rocky Brighton | Clinical relevance of a liver-heart microphysiological system to inform a patient risk scoring system for QT elongation |
| 183 | 738 | 10:00-11:30 am | J. Lowry Curley | Glial cell type composition in a 3D model of the central nervous system |
| 184 | 741 | 4:30 - 6:00 pm | Kim Haupt | Bioluminescent Assays for Monitoring Cell Health in Microphysiological Systems |
| 185 | 742 | 10:00-11:30 am | Peter Newham | EVOLVING ROLE OF INVESTIGATIVE TOXICOLOGY IN THE PHARMACEUTICALINDUSTRY |
| 186 | 743 | 4:30 - 6:00 pm | Bryan Black | Dorsal root ganglion tissue model of acute and chronic nociception using hiPSC co-cultures on microelectrode arrays |
| 187 | 745 | 10:00-11:30 am | Linda Griffith | Microphysiological Systems (MPS) Models of Endometriosis and Adenomyosis |