| THURSDAY JUNE 12, 2025<br>10:00–11:30 AM | | | |
|---|---|---|---|
| **Poster Board Number** | **Abstract Number** | **Presenter** | **Title** |
| **Track 2: MPS for Biomedical Research and Disease Modelling<br>Theme 2.1: Metabolic disorders and endocrine dysfunction** | | | |
| 100 | 17 | Shivam Sharma | Modelling diabetic wound pathophysiology using a 3D microphysiological system |
| 102 | 30 | Pimonrat Ketsawatsomkron | Distinct roles of the glycocalyx components in regulating endothelial functions in a perfused 3D human vessel-on-a-chip |
| 104 | 34 | Amna Adnan | Effects of obesity and weight loss on the vasculogenic potential of adipose stromal/stem cells in a microphysiological device |
| 106 | 56 | Marguerite Blignaut | Metabolic manipulation of a cardiac spheroid model to mimic mitochondrial dysfunction associated with obesity |
| 108 | 63 | Kazunori Shimizu | Assessment of food ingredients using human skeletal muscle MPS: Quercetin enhances slow myofiber development in vitro |
| 110 | 121 | Emily Tubbs | Fusion of iPSC-derived blood vessel organoids with human pancreatic islets: A first step towards mixed autologous and allogenic vascularized islet transplantation? |
| 112 | 157 | Sini Saarimaa | Effect of neurons and culturing conditions on adipogenic differentiation of adipose stromal/stem cells in a 3D microfluidic environment |
| 114 | 161 | Hanna Vuorenpää | Gellan gum-gelatin-based cardiac models support formation of smooth muscle cell-like network rather than vascular network |
| 116 | 194 | Ella Lampela | Engineered 3D skeletal muscle myobundles with functional vascular networks |
| 118 | 346 | Beatriz Felgueiras | Retina organoids as an in vitro model for early diabetic retinopathy and therapeutic screening |
| 120 | 424 | Esmay Hammink | Islet-on-a-chip: Assessing single pancreatic islet function |
| 122 | 462 | Mathilde Cadoux | Charting new paths in adipose tissue organoid development via stromal vascular fraction |
| 124 | 545 | Giovanna B. Elias | Innovation in static models with microfluidics: A new approach to liver steatosis modeling |
| 126 | 561 | Maarten S. van Agen | Developing a vascularized islet-on-a-chip model |
| 128 | 611 | Ben Cools | Optimizing alginate gel-based protection for liver spheroids in simulated altered gravity experiments |
| 130 | 646 | Batuhan Yıldız | Development and characterization of an advanced MASH in vitro 3D human liver co-culture spheroid model |
| 132 | 701 | Elena Sendino Garví | A novel KCNJ16-depleted kidney organoid model recapitulates the disease phenotype and shows lipid restoration upon treatment with statins |
| 134 | 704 | Consuelo Fabi | Modeling enteric hyperoxaluria in a microphysiological system and testing of microbial metabolites as potential protective agents |
| 136 | 753 | Ana Mora-Boza | Evaluation of estrogen's protective effects on intestinal inflammation utilising stem cell-derived intestinal organoids |
| 138 | 789 | Olivier Frey | AAV capsid variant screen for diabetes research: Building a scalable methodology for modification of human islet gene expression |
| 140 | 800 | Barbel ulmer | Multiparametric screening of MASH clinical candidates in human liver spheroids predicts clinical outcomes and reveals potential novel combinations for anti-steatotic and anti-fibrotic therapies |
| 142 | 812 | Constantin Berger | Establishment of a hiPSC-derived vascularized in vitro model of the endocrine pancreas |
| 144 | 937 | Andreas Stahl | aging in human microphysiological systems closely recreates the in vivo process with insights on rejuvenation |
| 146 | 961 | Claire Bigot | A human liver spheroid model demonstrates the efficacy of anti-steatotic and anti-fibrotic drug candidates |

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|---|---|---|---|
| 148 | 962 | Daniela Cornacchia | Transforming Preclinical R&D – AstraZeneca's Hub for Advanced Cell Models / New Approach Methodologies (ACM/NAMs) |
| 150 | 974 | Vivien Priebe | Biofabricating vascularized liver models: Advancing long-term primary hepatocyte cultivation |
| 152 | 980 | Igor Ivanov | High-density bio-CMOS microfluidic platform for high-throughput analysis and manipulation of living systems in longevity research |
| 154 | 985 | Nikolaos Nikolaou | Development of an iPSC-derived hepatocyte and hepatic stellate cell co-culture model for the study of metabolic-dysfunction associated steatohepatitis (MASH) in vitro |
| 156 | 427 | Ludovico Buti | Modelling complex immune processes using tonsil organoids to aid drug discovery |
| **Track 2: MPS for Biomedical Research and Disease Modelling<br>Theme 2.3: Organoids on a chip** | | | |
| 158 | 238 | Zhongze Gu | Pruning optimization of multi-functional AI models for recognition, segmentation, tracking, and classification of intestinal organoids |
| **Track 2: MPS for Biomedical Research and Disease Modelling<br>Theme 2.4: MPS for cancer precision medicine** | | | |
| 160 | 311 | Stéphanie Boder-Pasche | Vascularized tumor organoid-on-chip model with unidirectional, recirculated perfusion |
| 448 | 89 | Noelia Rubio Carrero | Translocation of LRP1-targeted carbon nanotubes across the blood-brain barrier in vitro and in vivo |
| **Track 3: MPS for Efficacy, ADME and Toxicity Testing<br>Theme 3.1 Drug efficacy testing** | | | |
| 162 | 60 | Ramazan Temizkan | Lab-on-a-chip device (LOC) for determining drug dose response |
| 164 | 80 | Felix Kleemiß | Advancing and modulating human heart-forming organoids (HFOs) for drug testing |
| 166 | 108 | Alessandro Polini | MiR-124-3p-enriched exosomes demonstrate therapeutic potential in a novel microfluidic triculture model replicating neuron-glia interactions in Alzheimer's disease |
| 168 | 189 | Jia-Wei Yang | A breathing mucociliary-on-a-chip platform for evaluating inhaled nanomedicine delivery and efficacy in cystic fibrosis |
| 170 | 205 | Soumya Mitra | Development of a human skin microphysiological system to investigate the impact of therapeutic intervention on vicious cycle of atopic dermatitis |
| 172 | 235 | Cheng Ma | Enhanced functional analysis of renal transporters using a proximal tubule-on-chip model derived from human iPSC kidney organoids |
| 174 | 321 | Epifania Bono | Automated high-throughput microhistology: Liquid handling and acoustofluidic platforms for automated production, maintenance, and patterning of human osteosarcoma microtissues |
| 176 | 326 | Pelin Saglam-Metiner | Intensive care unit (ICU) patient-on-a-chip model: Biomimicry for emulating mast cells and cerebral organoids in neuroinflammation |
| 178 | 354 | Carlo Kriesi | Exploring the impact of microenvironmental perturbations on non-small cell lung cancer cultures |
| 180 | 417 | Sabina Arias | Effects on cell viability of gold nanoparticles functionalized with polyethylene glycol and folic acid on 2D and 3D cell culture of SK-OV-3 in a microchip |
| 182 | 446 | Anne-Katrin Bothe | Microphysiological organ-on-chip models for therapeutic antibody validation and safety testing |
| 184 | 450 | Maud Vermeulen | Characterization of an integrated platform using sensory neurons as bio-digital sensors for PNS applications |
| 186 | 455 | Iris Schilt | Automated toxicology screening in a microfluidic, assay-ready adult stem cell-derived colon organoid model for evaluating therapy-induced gastrointestinal toxicity |

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|---|---|---|---|
| 188 | 472 | Mar Condor | High-definition multi-modal heart-on-a-chip platform for cardiotoxicity screening |
| 190 | 483 | Silvia Scaglione | An innovative immune-on-chip platform for studying tumor-immune interactions and evaluating novel immunomodulatory therapies |
| 192 | 501 | Saskia Schmid | Efficacy testing of new drug candidates for pulmonary fibrosis using AXILD model |
| 194 | 564 | Anne Mercier | A pilot study investigating the radiosensitization effects of candidate anticancer nanoparticles and small molecules: From cell culture to 3D spheroids |
| 196 | 579 | Randy Daughters | -Validation of minimally drug-absorbing thermoplastic Chip-R1 Organ-Chip consumable for assessment of liver metabolism and predictive toxicology |
| 198 | 583 | Carlos Mota | Kidney organoids as platform to investigate nephrotoxicity |
| 200 | 681 | Kaori Takama | The inflammatory response of gastrointestinal epithelial cells using a scalable microfluidic platform |
| 202 | 778 | Chrisna Gouws | Physiological relevance of an NCI-H69AR drug-resistant small cell lung cancer spheroid model during prolonged treatment |
| 204 | 788 | Sumin Bian | Personalized drug treatment for Crohn's disease through organoid-on-chips microvascular model and optical biosensors |
| 206 | 832 | Ji Hye Seo | Advancing liver-on-chip model for predictive drug toxicity assessments with dynamic flow conditions |
| 208 | 840 | Brianna Botlick | Efficacy and off-target toxicity testing of pre-clinical developmental compounds in heart-liver microphysiological systems |
| 210 | 875 | Federica Conte | Topology-driven pathway discovery via cross-modal integration of proteomics and tissue kinetics to unveil complex proteome modulation by inotropic drugs in human 3D engineered cardiac tissue |
| 212 | 885 | Cai Read | Developing a Concentration-Effect Relationship Between Cannabidiol and Stress-Induced Cognitive Dysfunction of Human-Derived Cortical Networks |
| 214 | 903 | Sakshi Garg | HepSAFE: a multi-step AI-powered approach to better understand and predict Drug-induced Liver Injury (DILI) |
| 216 | 958 | Fong Cheng Pan | Development of iPSC-Derived Human Liver Organoids for Preclinical Drug Testing and Toxicology Studies |
| 218 | 964 | Shoka Takebayashi | Development of MPS device with collagen  membrane (ECM-Chip) for physiological hepatocyte culture |
| 220 | 969 | Marie Frèrejacques | High throughput generation of pancreatic clonal organoids and tumoroids in extracellular matrix microbeads: application to toxicity evaluation of a chemotherapeutic agent |
| 222 | 979 | Sunghun Cheong | High-throughput 3D phenotypic and molecular profiling in an open microfluidic platform |
| 224 | 987 | Wooseok Lee | high content drug screening based on spatial transcriptomics for high-throughput microarray chip |
| **Track 3: MPS for Efficacy, ADME and Toxicity Testing<br>Theme 3.2 Local and acute toxicity** | | | |
| 226 | 47 | Francesca Moretti | Correlation of in vitro assays for hepatotoxicity with liver toxicity observed in dogs for a small molecule intended for LDL-C lowering |
| 228 | 54 | Catherine K. Yeung | Mechanistic toxicology of ochratoxin-A in the kidney proximal tubule |
| 230 | 96 | Daiju Yamazaki | Evaluation of drug-induced cardiotoxicity via hepatic metabolism in a liver-heart co-culture system using a modified BioStellarTM plate |
| 232 | 111 | Katie Kubek-Luck | Use of organoids to understand mechanism of drug-induced intestinal toxicity |

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|---|---|---|---|
| 234 | 115 | Mateo G. Vasconez M. | Body-on-a-chip towards neurotoxicity monitoring in environmental safety and CBRN applications |
| 236 | 129 | Nina Hobi | A proximal tubule-on-chip model for nephrotoxicity and safety assessment |
| 238 | 147 | Yixin Sun | Development of perfusable vascularized devices to mimic the liver microenvironment for the evaluation of drug-induced liver injury (DILI) compounds |
| 240 | | | |
| 242 | 196 | Larissa Bueno Tofani | Advanced 3D kidney models as alternative to animal-based toxicity assays |
| 244 | 198 | Axelle Buydens | Establishment of rabbit stem cell lines as new approach methodologies for developmental toxicity testing |
| 246 | 217 | Krysten Jones | Utilizing microphysiological systems and machine learning for rapid neurotoxin exposure detection and countermeasure development |
| 248 | 231 | Joyce Vriend | Developing an in vitro platform for accurate prediction of drug-mediated liver transport inhibition |
| 250 | 237 | Julia Matla | Mitochondrial toxicity testing for drugs and chemicals in hepatocyte-like liver organoids |
| 252 | 273 | Arif Ibrahim Ardisasmita | HeLLOs: Novel hepatocyte-like liver organoids for liver disease modeling and drug toxicity prediction |
| 254 | 278 | Lisa Marroquin | Characterization of lineage-specific small molecule hematotoxicity using human bone marrow-on-a-chip model |
| 256 | 280 | Jarrett Bliton | A high-throughput gut-immune co-culture model that replicates the inflamed gut epithelium with applications in efficacy and toxicity |
| 258 | 294 | Takuma Iguchi | Comparative analysis of various CIVMs for liver toxicity assessment: Spheroids, organoids, and liver-on-chip system |
| 260 | 303 | Shota Fukada | Quantitative evaluation of the thickness of cell-surface mucin layer on human crypt-derived differentiated intestinal epithelial cells for the risk assessment of drug-induced gastrointestinal toxicity |
| 262 | 314 | Yuji Ishida | Positive effects of humoral factors secreted by cultured human hepatocytes from humanized liver chimeric mice on the maintenance of multiple hepatic functions in cryopreserved primary human hepatocytes |
| 264 | 374 | Muntasir Mamun Majumder | Qualification of human 3D lung models through predictive correlation with established in vivo outcomes |
| 266 | 494 | Justina Then | Evolving translation: The use of human and preclinical animal liver microphysiological systems for improved understanding of species-specific drug-induced liver injury |
| 268 | 565 | Kevin Ling | Development of an outer retinal blood barrier-on-a-chip for screening drug bioavailability, toxicity, and barrier disruption potential |
| 270 | 574 | Andrew LaCroix | Improving the stability and reproducibility of clinical neurotoxicity predictions from a high-throughput compatible neural organoid platform |
| 272 | 598 | George Truskey | Engineered human skeletal muscle myobundles illuminate potential chemical toxicity |
| 274 | 606 | Taci Pereira | 3D bioprinted human vascularized liver MPS for drug-induced liver injury assessment |
| 276 | 609 | Dimitrios Bitounis | Immune-competent liver-on-chip model for the assessment of immune-related DILI |
| 278 | 616 | Julen Sanz-Serrano | Development of a triple cell co-culture spheroid model for cholestatic drug-induced liver injury prediction |
| 280 | 617 | Ferran Jardi | Intestinal organoids for evaluating drug-induced intestinal toxicity employing high-dimensional readouts |

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|---|---|---|---|
| 282 | 663 | Samantha Costa | Full-thickness skin-on-chip model integrated with graphene-based biosensors for nanotoxicity assessment |
| 284 | 685 | Roberta Visone | uHeart: A human 3D beating heart-on-chip platform predicting drug-induced cardiac contractility alterations |
| 286 | 691 | Andres Tabernilla | Exploring the potential short-term and long-term hepatotoxic effects of polystyrene microplastics using 3D human liver spheroid cultures |
| 288 | 724 | Luke Coyle | Qualification of human lung alveolus-chip for preclinical safety assessment of an antibody-drug conjugate with a patient-specific risk factor |
| 290 | 748 | Marta Ripamonti | Investigating brake wear particle toxicity using an advanced lung alveolar model |
| 292 | 759 | Axel Vicart | An in vitro rat epididymis organoid model to investigate in vivo vacuolation findings of a drug candidate |
| 294 | 790 | Arturs Abols | Evaluation of tamoxifen effects on gut stem cells using a vascularized colon-on-chip model derived from primary cells |
| 296 | 797 | Harman Chaggar | Human organoid lines for modelling intestinal epithelial barrier in vitro |
| 298 | 799 | Alberto Mantegazza | Characterization and toxicological evaluation of atrial and ventricular 3D models in a beating heart-on-chip platform |
| 300 | 802 | Jan Lichtenberg | Species-specific liver microtissues: A set of microphysiological systems to assess translational hepatotoxicity in drug development |
| 302 | 824 | Ana Carolina Migliorini Figueira | Development of a liver spheroid-based toxicity test as an alternative to animal testing |
| 304 | 834 | Vânia Vilas-Boas | Effects of silver nanoparticles on barrier function and health: Studies on a new triculture model of the human lung barrier |
| 306 | 940 | Mohamed Kreir | Evaluation of drug-induced effects on neuronal oscillations, mutlielectrode arrays and seizure risk in human induced pluripotent stem cell derived neuronal 2D and 3D (spheroid) cultures |
| 450 | 86 | Annie Hamel | New approach method (NAM) for predictive genotoxicity using a microphysiological system (MPS) |
| **Track 3: MPS for Efficacy, ADME and Toxicity Testing<br>Theme 3.3: Systemic and chronic toxicity** | | | |
| 308 | 58 | Liu Haitao | Human placental microphysiological system derived from trophoblast stem cells for nanotoxicity assessment |
| 310 | 102 | Eliška Řehůřková | 3D scaffold-based steroidogenesis models for male reproductive toxicology |
| 312 | 150 | Seiichiro Kurashige | Evaluation of cytokine release induced by antibodies using a vascular-on-a-chip system |
| 314 | 165 | Natacha Bohin | Integration of humanized in vitro bone marrow MPS data with QST haematotoxicity model predicts safer clinical haematological profile for AstraZeneca's PRMT5 inhibitor AZD3470, compared with first generation PRMT5 inhibitor |
| 316 | 191 | Tessa Hagens | Establishing a quantitative and advanced in vitro test system to evaluate chemical-induced liver fibrosis |
| 318 | 233 | Quentin Faucher | Development of a hollow fiber membrane-based blood-brain barrier-on-chip model to study the kidney-brain axis |
| 320 | 307 | Ke Hu | Hepatotoxicity evaluation in repeated doses using on-chip perfusion MPS (BioStellar™ Plate) with membrane-based direct oxygenation |
| 322 | 456 | Carol De Santis | Current advances and challenges in MPS and 3D models for cardiovascular safety applications |
| 324 | 621 | Thi Phuong Tao | Microphysiological rat testis-liver co-culture model for investigating steroid hormone disruption |

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| 326 | 633 | Annika Drees | Optimization of the drug-induced cholestasis index based on advanced modeling for predicting liver toxicity |
| 328 | 737 | Jean-Pierre Valentin | An update of the evolving role of investigative toxicology in the pharmaceutical industry |
| 330 | 752 | Emma Arnesdotter | HepaRGTM cells in microphysiological systems: A practical tool for food safety research |
| 332 | 773 | Andre Lopes Rodrigues | Kidney microphysiological system for safety de-risking of antisense oligonucleotide candidates during pre-clinical development |
| 334 | 780 | Aakash Patel | Microphysiological human-on-a-chip model of chronic opioid overdose rescue efficacy and off-target toxicity |
| 336 | 795 | Laeticia Perez | New in vitro model to classify poorly soluble low toxicity particles |
| 338 | 833 | Shweta Bendre | Liver-on-chip: Advancing toxicology studies for early prediction of DILI in different species |
| **Track 3: MPS for Efficacy, ADME and Toxicity Testing<br>Theme 3.4: Pharmaco- and toxicokinetics** | | | |
| 340 | 24 | Pedro G.M. Canhão | Digesting colonic drug disposition using a novel human organotypic colon in vitro microtissue |
| 342 | 66 | Yassen Abbas | Combining a primary gut/liver MPS with mathematical modelling for a mechanistic understanding of midazolam's ADME profile and oral bioavailability |
| 344 | 94 | Takeshi Sakura | High-sensitivity LC-MS/MS method for antibody quantification in blood-brain barrier receptor-mediated transcytosis evaluation with iPSC-derived brain microvascular endothelial cells |
| 346 | 119 | Behnam Amiri | Optimizing sampling strategies in organ-on-chip systems for improved preclinical pharmacokinetic studies |
| 348 | 137 | Antonio Varone | Development of nonclinical species-based in vitro model systems to support drug-induced skeletal muscle toxicity risk assessment |
| 350 | 140 | Yoshiki Hashimoto | Human intestinal spheroid-based serotonin release assay for predicting drug-induced emesis |
| 352 | 178 | Sepand Bafti | Establishment of a BBB chip model for different applications |
| 354 | 200 | Sarah Barron | Validating in vitro brain barrier models for assessing transport and clearance of novel drug modalities across the brain |
| 356 | 204 | Alexandre Martins | Development of a 3D-printed liver-on-chip with a low-binding polymer |
| 358 | 253 | Laura Ejarque | Development of a brain organoid-on-chip platform for neurotoxicity testing |
| 360 | 297 | Hiroyuki Kusuhara | Characterization of human intestinal spheroid-derived differentiated cells for ADME studies |
| 362 | 308 | Yang Liang | Prediction of human enterohepatic circulation of drugs based on advanced in vitro cultivation systems and pharmacokinetic modeling |
| 364 | 407 | Benoit Cox | Evaluation of a hiPSC-derived blood-brain barrier-on-chip model to study brain exposure of small molecules |
| 366 | 419 | Fahd Tibourtine | Evaluation of a gut-liver-on-chip system as an alternative to current static in vitro models |
| 368 | 443 | Fumiya Tokito | A novel in vitro liver culture system for continuous bile collection |
| 370 | 447 | Shinji Sugiura | Development of a blood-brain barrier model using iPSC-derived brain microvascular endothelial cells in a pressure-driven biomimetic system for evaluation of drug permeability across the blood-brain barrier |
| 372 | 451 | Osvaldo Beltran Osuna | Organ-on-a-chip systems for the evaluation of nanoplatforms |
| 374 | 481 | Gergo Borka | A dynamic double-flow gut-on-chip model for predictive absorption studies in vitro |
| 376 | 514 | Lina Mettler | Microfluidic liver chip for the prediction of complex drug-drug interactions in humans |

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| 378 | 562 | Khadidja Side Larbi | Characterization of a novel in vitro human blood-brain barrier-on-a-chip model in order to validate its use in drug development |
| 380 | 625 | Shinyoung Kim | Optimization of a 3D microfluidic renal proximal tubule-on-a-chip system for nephrotoxicity assessment |
| 382 | 668 | Isy Petit | Modeling the liver-kidney axis: A dual-organ-on-chip approach for studying membrane transporter-mediated drug disposition and toxicity |
| 384 | 713 | Christina Hunkeler | Optimizing and validating 3D primary human hepatocyte spheroid monoculture and co-culture models of drug-induced liver injury (DILI) |
| 386 | 714 | Ivana Cervenova | Comparing 3D spheroid drug-induced liver injury (DILI) toxicology models derived from a human hepatocyte cell line, primary human hepatocytes in monoculture, and primary human hepatocytes in co-culture with non-parenchymal cells |
| 388 | 742 | Evita van de Steeg | Advancing drug development with standardized and scalable gut-liver microphysiological systems |
| 390 | 757 | Naoki Ishiguro | Enhancing in vitro evaluation of renal drug metabolism/transport and toxicity using 3D cultured renal proximal tubular epithelial cells (RPTECs) |
| 392 | 774 | Kenta Shinha | BiostellarTM plate-based gut-liver microphysiological system (MPS) to predict bioavailability |
| 394 | 786 | Madalena Cipriano | Liver chip: Non-invasive multiparametric optical sensing approaches for mechanistic hepatotoxicity studies |
| 396 | 856 | Christopher Long | Pharmacokinetic-pharmacodynamic modeling of stress relieving properties of Echinacea purpurea in a multi-organ human-on-a-chip |
| 398 | 892 | Elisabeth Gill | Application of a Bioengineered Intestinal Epithelium for DMPK studies |
| 400 | 934 | Daichi Onozato | Establishment of a novel in vitro biliary excretion assessment model using human CLiPs-derived bile ducts co-cultured with HepaSH cells |
| 402 | 951 | Xumei Gao | multiplexed microplate-based superfusion and drug dosing system for pharmacokinetic profile emulation |
| 404 | 973 | Shashi Tiwari | iPSC-derived human small intestinal organoids as a scalable model for drug metabolism and toxicology studies |
| **Track 3: MPS for Efficacy, ADME and Toxicity Testing<br>Theme 3.5: Cell and gene therapy** | | | |
| 406 | 53 | Oliver Culley | A liver microphysiological system to study the delivery and efficacy of oligonucleotide-based therapeutics |
| 408 | 263 | Alejandro Ogando | Liver-on-a-chip microfluidic devices: An in vitro model for therapeutics using biomimetic nanoparticles as carriers |
| 410 | 359 | Aanchal Mathur | Exploring the role of macrophages in modulating transfection efficiency using 3D chip models |
| 412 | 373 | Samantha Morón-Ros | 3D models of microencapsulated human liver cell pools through bioprinting |
| 414 | 544 | Julian Gonzalez-Rubio | Mesenchymal stromal cell rejuvenation by iPSC reprogramming and redifferentiation decreases their angiogenic potential in a vascularization-on-a-chip platform |
| 416 | 651 | Julia Mantaj | Analysis of hydrogel cell therapy efficacy for inflammatory bowel disease on a gut-chip system |
| 418 | 857 | Murat Cirit | Multi-cellular liver in vitro platform for predicting pharmacological and toxicological effects of gene therapy products |
| 420 | 968 | Ana Spencer | Next-generation neurotherapeutics: integrating microfluidics and targeted nanoparticles |

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| **Track 3: MPS for Efficacy, ADME and Toxicity Testing<br>Theme 3.6: Drug discovery for precision medicine** | | | |
| 422 | 112 | Soheila Zeinali | Development of an open-top microfluidic platform for tumor spheroid vascularization and drug testing |
| 424 | 124 | Dilyana Filipova | Why do drugs keep failing? A systematic analysis of drug failure rates from 1963 to 2017 |
| 426 | 132 | Lauriane Cabone | Evaluating immunotherapy toxicity with a patient-derived lung-on-chip |
| 428 | 153 | Minseong Kim | Development and quality control validation of a renal microphysiology system utilizing thermoplastic polymers |
| 430 | 530 | Alessandro Iuliano | Advancing tissue-engineered muscle models: High-throughput and automation of the Cuore smartlid platform |
| 432 | 588 | Chiara Diacci | Pharmacological validation of a novel BBB-on-chip using an engineered silicon micromesh MEA chip |
| 434 | 761 | De Korte Tessa | A plug-and-play µFluidic Adaptor: Transforming standard well plates into dynamic microphysiological systems |
| 436 | 864 | Cherry Gupta | A 3D in vitro model of the blood-nerve barrier |
| 438 | 869 | Nathan Post | A Human-on-a-Chip® platform for personalized prediction of cancer treatment efficacy and toxicity |
| 440 | 870 | Freya Woods | Leveraging flow cytometry continuous data for drug impact analysis in a bone marrow-on-a-chip system |
| 442 | 920 | Lindsay Mesure | Choosing and Validating Assay Systems to Interrogate 3D Cell Culture Models |
| 444 | 946 | Jure Fabjan | ML-based enhancement of mechanistic models using OMIC data |
| 446 | 970 | Lucile Mercier | End-to-End Automated Organoid Screening Platform: Application in Breast Cancer Drug Screening |
| 448 | 993 | Christopher Hughes | The vascularized Gravity-driven Organ Chip Duo (GO-Chip Duo): the versatile microphysiological system for complex system modeling |