EUROoCS 2024

Conference program

Conference program

Pre-meeting Wednesday July 3rd 2024 EUROOCS 2024 Academy				
DAY 1				
Wednesday July 3rd 2024 Registration				
	11:00	-14:30		
	Welcome and O	pening Remarks		
	Keynote: Microengineered Biomimi	- 15:15 cry of Human Physiological Systems		
	<u>Prof. D</u> Department of Bioengineerin 15:15	<u>an Huh</u> g, University of Pennsylvania -16:00		
Plenary sess	ion: Official publication of the internation of the	onal Roadmap for Organ-on-Chip Star <u>). van der Meer</u>	ndardization	
	16:00	-16:15		
	Coffee 16:15	e break -16:45		
1A- Enabling Technologies	1B - Barrier-based models	1C - Tumor models	1D - Pharmacology/Toxicology	
16:45 -18:15	16:45 -18:15	16:45 -18:15	16:45 -18:15	
Chair: Albert van den Berg Co-Chair: Gülden Akcav	Chair: Liliana Moreira Teixeira Co-Chair: Tim Kaden	Chair: Ben Maoz Co-Chair: Silvia M. Mihăilă	Chair: Anna Herland Co-Chair: Andrea Mainardi	
Selected Talk 1A-1 16:45-17:15 Advanced in vitro platform with smart porous membrane for a comprehensive cell barrier analysis Saeedeh Ebrahimi Takalloo Life Science Technologies Department, IMEC, Leuven, Belgium	Selected Talk 1B-1 16:45 -17:15 Patient-specific hiPSC-derived microphysiological system of the blood brain barrier to study impaired brain glucose metabolism <u>Monika Yanovska</u> AIMES, Karolinska Institute, Stockholm, Sweden; Department of Protein Science, KTH Royal Institute of Technology, Sweden	Selected Talk 1C-1 16:45 -17:15 Studying the impact of the tumor microenvironment and spatial heterogeneity on Temozolomide resistance in glioblastoma with a microphysiological model of the blood-brain barrier and glioblastoma <u>Andrea Pavesi</u> Institute of Molecular and Cell	Selected Talk 1D-1 16:45 -17:15 Next-Gen Prediction of Pharmacokinetics in Pregnancy: Leveraging a Tri-Organ-on-Chip Digital Twin Interface <u>Christian Maass</u> MPSlabs, ESQlabs, Saterland, Germany	
Regular Talk 1A-217:15 - 17:35A human iPSC-derived isogenicmodel of the neurovascular unit toexplore blood-brain barrierdysfunction in neuroinflammationPelin KasapTheodor Kocher Institute, Universityof Bern, Bern, Switzerland	Regular Talk 1B-217:15 - 17:35Engineering outer Blood RetinalBarrier on a chip to modelpathological events in eye andstudy the effect of modulator drugsDavide CartaSchool of Engineering and MaterialsScience, Queen Mary University ofLondon, London, United Kingdom	Biology IMCB; A*STAR, Singapore Regular Talk 1C-2 17:15 -17:35 New bioanalytical microsystem for vascularized and heterogeneous ovarian cancer tissue modelling Magdalena Flont Center of Advanced Materials and Technologies, Warsaw University of Technology, Warsaw, Poland	Regular Talk 1D-217:15 - 17:35Comparison of Spheroids and aMicrofluidic Chip Model asAdvanced in Vitro Liver ModelsHeidrun Ellinger-ZiegelbauerBayer AG, Wuppertal, Germany	
Regular Talk 1A-317:35-17:55Tuning the hydrogel physical properties by 2-photon 3D printing to investigate glioblastoma cell migration on-chip Laurent Barbe Department of Materials Science and Engineering, Science for Life Laboratory, Uppsala University, Uppsala, Sweden	Regular Talk 1B-317:35 -17:55Age-Related Macular DegenerationPatient hiPSC-derived Model of theOuter Blood-Retinal Barrier on-ChipTarek GensheimerDepartment of Applied Stem CellTechnologies, University of Twente,Enschede, the Netherlands	Regular Talk 1C-317:35 -17:55Co-operation between Decitabine and the IL-33/ST2 axis in tumor- immune cross talk and in overcoming resistance to PD-1blockade against melanoma by a multidisciplinary approach Francesco Noto Department of Oncology and Molecular Medicine, Istituto Superiore di Sanità, Roma, Italy	Regular Talk 1D-3 17:35 -17:55 Clinical pharmacokinetic dosing and haemotoxic responses to carboplatin in lab-grown human bone marrow to study treatment response and recovery with high- throughput robotic automation <u>Kainat Khan</u> Clinical Pharmacology & Safety Sciences, Biopharmaceutical R&D, AstraZeneca, Cambridge, United Kingdom	
Regular Talk 1A-417:55-18:15Connecting the Blood-BrainBarrier to Cerebral Organoids in a membrane-free hiPSC-basedorgan-on-chip platformHenrique Nogueira PintoDepartment of Molecular CellBiology and Immunology, Amsterdam UMC location Vrije Universiteit, The Netherlands; Amsterdam institute for Infection and Immunity, Amsterdam, The Netherlands	Regular Talk 1B-4 17:55-18:15 Human-based placenta-embryo chip for developmental toxicity assessment of nanoparticles <u>Manon Murdeu</u> Particles-Biology Interactions, Empa, Swiss Federal Laboratories for Materials Science and Technology, St. Gallen, Switzerland	Regular Talk 1C-417:55-18:15Development and validation of an organ-chip model of breast cancer bone metastasisStefaan Verbruggen Centre for Predictive in vitro Models, Engineering and Materials Science, Queen Mary University of London, London, United Kingdom	Regular Talk 1D-4 17:55 -18:15 Airway-on-Chip for Assessing the Carcinogenic Potential of Air Pollutants via Dormant Lung Cancer Awakening <u>Arbel Artzy Schnirman</u> Applied Medical Technology Research Center (MATRiC), Rambam Health Care Center, Haifa, Israel	
	Networking Aperitif 18:15 – 20:00			

18:15 - 20:00

End of Day 1

	DA Thursday J	AY2 uly 4th 2024		
	Aula I Dienary	Magna		
EUROoCS members'meeting 08:45 – 09:45				
Keynote: H	Human 3D organotypic culture systems Prof. Iva	towards tissue regeneration and diseas an Martin	e modeling	
Head of Tissu	ue Engineering Research Group; Chair of 09:45	Department of Biomedicine, University I -10:30	Hospital Basel	
	Coffee 10:30	e break -11:00		
2A - Immune system	2B - Sensors and monitoring (1)	2C - Multi-organ/Multi-tissue interaction	2D - Musculoskeletal Models	
Aula Magna	Room T.1.1	Room T.1.2	Room T.1.3	
11:00 -12:30	11:00 -12:30	11:00 -12:30	11:00 -12:30	
Chair: Martin Raasch	Chair: Torsten Mayr	Chair: Javier Ramon	Chair: Andries van der Meer	
Selected Talk 2A 1 11:00 11:30	Selected Talk 2B 1 11:00 11:30	Selected Talk 2C 1 11:00 11:30	Selected Talk 2D 1 11:00 11:30	
Lymphoid tissue-on-chip to test T	Improving Drug Evaluation for	Modeling the heart-brain axis	Exploiting compartmentalization to	
cell-dependent antibody responses	Duchenne Muscular Dystrophy by	using innovative organ-on-chip	unravel the contribution of	
and vaccine efficacy in vitro	Biosensing of Myotube Integrity	technology	cartilage and synovium to	
<u>Claudia Teufel</u>	through Organ-on-a-Chip	Verena Schwach	osteoarthritis pathogenesis in a	
Department for Microphysiological	Technology	Applied Stem Cell Technologies,	novel joint-on-chip platform	
Systems, Eberhard Karls University	Ainoa Tejedera-Villafranca	University of Twente, Enschede, The	Cecilia Palma	
Tübingen, Germany; NMI, University	Institute for Bioengineering of	Netherlands	Department of Electronics,	
of Tübingen, Reutlingen, Germany	Catalonia (IBEC), Barcelona, Spain		Information and Bioengineering	
			(DEIB), Politecnico di Milano, Milano, Itali	
Regular Talk 24-2 11:30 -11:50	Regular Talk 2B-2 11:30 -11:50	Regular Talk 2C-2 11:30 -11:50	$\begin{array}{c} \text{Milland, fluily} \\ \text{Regular Talk 2D-2} \\ 11:30 - 11:50 \end{array}$	
Liver-on-chip platform for	Modeling the human blood brain	An organ-on-chip platform for	Ossification-on-a-Chin: Cultivation	
studying recruitment and	barrier using a novel micromesh	simulating drug metabolism along	of human bone-like organoids in a	
differentiation of circulating	multielectrode array chip	the gut-liver axis	sophisticated organ-on-a-chip	
monocytes	Mar Cóndor	Mara Lucchetti	device for modeling early	
Aleksandra Aizenshtadt	Life Science Technologies	Luxembourg Centre for Systems	intramembranous ossification	
Hybrid Technology Hub, Institute of	Department, IMEC, Leuven, Belgium	Biomedicine (LCSB), University of	Julia Scheinpflug	
Basic Medical Science, University of		Luxembourg, Esch-sur-Alzette,	German Centre for the Protection of	
Osio, Osio, Norway		Luxembourg	Laboratory Animals, German Fadaral Institute for Risk Assassment	
			Rerlin	
Regular Talk 2A-3 11:50 -12:10	Regular Talk 2B-3 11:50 -12:10	Regular Talk 2C-3 11:50 -12:10	Regular Talk 2D-3 11:50 -12:10	
Advanced Organ-on-Chip for	"On pillar" metabolomics and	Placenta-On-Chip: modelling the	A mechanically active nucleus-	
Predictive Drug Testing and	contraction force integration via	embryonic trophoblast-	pulposus on-chip to study the	
Human Disease Modeling with 3D	topological data analysis enables in	endometrial stroma cross-talk	connection between mechanical	
Cancer Tissues and Immune Cells	vitro cardiotoxicity studies in 3D	Joanna Filippi	loading and intervertebral disc	
Scarlione	Engineered neart ussues	Engineering University of Rome Tor	Bianca Aterini	
React4Life Genova Italy: CNR	TML Radboud UMC Niimegen The	Vergata Rome Italy	Department of Biomedicine	
Genova, Italy	Netherlands; AST, University of	, ei gaia, rionie, raily	University of Basel & University	
	Twente, Enschede, The Netherlands		Hospital Basel, Basel Switzerland	
Regular Talk 2A-4 12:10 -12:30	Regular Talk 2B-4 12:10 -12:30	Regular Talk 2C-4 12:10 -12:30	Regular Talk 2D-4 12:10 -12:30	
Development of a perfused	Retinal organoid-on-chip for long-	Towards unraveling systemic	Tendon on a chip model	
vascularised lymph node-on-chip	term electrophysiology from retinal	effects of neurodegenerative	development to study IFM and FM	
Andrew I Morrison	ganglion cells	diseases with an iPSC-derived	sub-population behaviour and	
Department of Molecular Cell	Rouhollah Habibey	microbiome-gut-brain axis on a	crosstalk Catain Dana a	
Biology and Immunology, Amsterdam	Department of Opnthalmology, Universitäts Augenklinik Bonn	Lena Sonhie Koch	<u>Catrin Bevan</u> School of Engineering and Materials	
Netherlands: Amsterdam institute for	University of Ronn Ronn Germany	Department of Applied Stem Cell	School of Engineering and Materials Science Oween Mary University of	
Infection and Immunity. Amsterdam.	Chiversity of Bohn, Bohn, Cermany	Technologies. TechMed Centre.	London, London, United Kingdom	
The Netherlands		University of Twente, Enschede, the		
		Netherlands		
	Lunch/Post	ter session 1 - 14.00		
	12:50			
	Aula Plenaru	viagna viagna		
	Updates from Nation	onal OoC initiatives		
Keynote: Building a roadmap towar	14:00 rds Regulatory Acceptance of NAMs in	-14:50 the Development and Approval of Pha	rmaceuticals: the vision of the EMA	
	3Rs Worl	king Party		
	$\frac{Sonja}{FMA} = \frac{Sonja}{FMA}$	Beken Vorking Party		
LMA SKS WORKING PARTY 14-30-15-15				
	Aula Magna			
Regulatory-Indust	rial Round Table: Organ-on-Chip base	d test methods for the authorization of	medicinal products	
	15:15	-16:15		

	Coffee break 16:15-16:45	
Round Table 1	Round Table 2	Round Table 3
Room T.1.1	Room T.1.2	Room T.1.3
CEN-CENELEC Focus Group discussion on drafting the Roadmap for Organ-on-Chip Standardization and next steps 16:45 - 17:30	Building your future: Exploring career options in the Organ-on-Chip field 16:45 – 17:30	Exploring New Horizons: Tissue Chips and Organoids in Space Research 16:45 – 17:30
10.15 17.50	10110 17100	

End of Day 2

DAY3 Friday July 5th 2024			
Aula Magna			
Keynote: Leveraging organoids and organs-on-chip in drug development Kimberly Homan Genentech 09:00-09:45			
Keynote	: Combining in vitro and in silico tools:	from living implants to the virtual hun	nan twin
	<u>Prof. Lie</u> University of Lièg 09:45	<u>sbet Geris</u> ge and KU Leuven -10:30	
	Coffee 10:30	e break -11:00	
3A - Vascular and Cardiovascular Models	3B - Towards precision medicine	3C - Biomechanical Forces	3D - Organoids-based models
Aula Magna	Room T.1.1	Room T.1.2	Room T.1.3
11:00 -12:30	11:00 -12:30	11:00 -12:30	11:00 -12:30
Chair: Christine Mummery	Chair: Monica Piergiovanni	Chair: Dries Braeken	Chair: Alessandro Pellegata
Co-Chair: Huub Weener	Co-Chair: Pierre Caullet	Co-Chair: Julia Marzi	Co-Chair: Begüm Gökçe
Selected Talk 3A-1 11:00 -11:30 Oxygen levels in a vessel-on-chip as a function of chip materials and	Selected Talk 3B-1 11:00 -11:30 Development of a patient-matched microfluidic arthritic joint model	Selected Talk 3C-1 11:00 -11:30 MechanoCHIP: a resealable microfluidic platform to enable	Selected Talk 3D-1 11:00 -11:30 A microfluidic platform integrating functional vascularized organoids-
medium refreshment intervals	as a tool for personalized therapies	mechanical loading on Transwell-	on-chip
Laura E. de Heus	Chiara Arrigoni Regenerative Medicine Technologies	like inserts Sandra Maugai	<u>Clement Quintard</u>
Technologies University of Twente	Lab Ente Ospedaliero Cantonale	<u>Sandro Weucci</u> Micronit BV Enschada Tha	(IBC) Vancouver, Canada
Enschede The Netherlands	Switzerland: Euler Institute Faculty	Netherlands	(OBC), Vancouver, Canada
Ensencee, The Tremertanus	of Biomedical Sciences, USI, Lugano.	1 concentrations	
	Switzerland		
Regular Talk 3A-2 11:30 -11:50	Regular Talk 3B-2 11:30 -11:50	Regular Talk 3C-2 11:30 -11:50	Regular Talk 3D-2 11:30 -11:50
Heart-on-chip device to study	A human-derived	Novel modular in vitro chips for	A Low-Cost Bioreactor for Retinal
accelerated cardiac aging in space	Cholangiocarcinoma-on-chip for	the study of external force on tissue	Organoid Microenvironmental
Emil Rehnberg	targeted therapy	Yael Bardoogo	Control
Department of Molecular	Michela Anna Polidoro	Department of Biomedical	Emma Drabbe
Biotechnology, Ghent University,	Hepatobiliary Immunopathology Lab,	Engineering, Tel Aviv University, Tel	Department of Ophthalmology,
Belgium; Belgian Nuclear Research	Humanitas Clinical and Research	Aviv, Israel	University of Miami (FL), Miami, United States
Pegular Talk 3A 3 11:50 12:10	Pegular Talk 3B 3 11:50 12:10	Pegular Talk 3C 3 11:50 12:10	Pagular Talk 3D 3 11:50 12:10
Regular Talk SA-5 11.50-12.10 Rediotherany and hadron therany	Development of an all-Human	Transparent Electroactive	The numpless recirculating Organ-
on-chin: a radiobiological model	Vascularized Model of Pancreatic	Actuators for Organ-on-Chip	on-Chip platform – a versatile
for vascular damage	Islets on- Chip: Towards	Platforms	platform for improved organoid
Luca Possenti	Personalized Medicine for Type 1	Alireza Tajeddin	loading
Data Science Unit, Fondazione	Diabetes	ECTM, Department of	Mathias Busek
IRCCS Istituto Nazionale dei Tumori,	Mélanie Lopes	Microelectronics, EEMCS, Delft	Hybrid Technology Hub, University
Milano, Italy	Université Grenoble Alpes, INSERM,	University of Technology, Delft, The	of Oslo, Oslo, Norway; Department
	CEA, IRIG, Biomics, Grenoble,	Netherlands	of I I I T C .
	France		Immunology and Transfusion Madiaina Osla University Hagnital
			Oslo Norway
Regular Talk 3A-4 12:10 -12:30	Regular Talk 3B-4 12:10 - 12:30	Regular Talk 3C-4 12:10 -12:30	Regular Talk 3D-4 12:10 -12:30
Integration of hiPSC-derived	Modelling Sex-Specific Differences	Analysis of piezoelectric-PDMS for	Complex human neuromuscular
macrophages in a 3D vessel-on-chip	in Human Osteoarthritis Using An	use in contractile measurements-	organoids as disease modelling and
model	Osteochondral-Unit-On-Chip	on-chips	drug screening tools
Theano Tsikari	Francisco Conceição	Alexis Applequist	Chrysanthi-Maria Moysidou
Department of Anatomy &	Department of Advanced Organ	Department of Biomedical	Max Delbruck Center for Molecular
Embryology, Leiden University	bioengineering and Therapeutics,	Engineering, University of Arkansas,	Medicine in the Helmholtz
Meaical Center, Leiden, The Notherlands	University of Iwente, Enschede, the Natherlands	United States	Association, Germany
Iveineriunus	weineriunus	1	1
Lunch/Poster session 2 12:30 – 14:00			

4A - In silico/AI/omics approaches	4B-Disease models and advanced therapies	4C - Infection/vaccines	4D - Sensors and monitoring (2)
Aula Magna	Room T.1.1	Room T.1.2	Room T.1.3
14:00 -15:30	14:00 -15:30	14:00 -15:30	14:00 -15:30
Chair: Alberto Rainer	Chair: Peter Loskill	Chair: Pelin Candarlioglu	Chair: Erika Györvary
Co-Chair: Alberto Mantegazza	Co-Chair: Camila Betterelli Giuliano	Co-Chair: Enrico Cavarzerani	Co-Chair: Sevgi Onal
Selected Talk 4A-1 14:00 -14:30	Selected Talk 4B-1 14:00 -14:30	Selected Talk 4C-1 14:00 -14:30	Selected Talk 4D-1 14:00 -14:30
Multi-organ microphysiological	DSS-induced colitis-on-chip model	Recapitulating memory B cell	Structural and functional
systems for cardiovascular, renal,	to study the therapeutic potential of	responses in a Lymphoid Organ-	characterization of a Parkinson's
and metabolism research	the secondary bile acid lithocholic	Chip to evaluate mRNA vaccine	disease-specific neuronal
<u>Liisa Vilén</u>	acid in vitro	boosting strategies	microcircuit model on CMOS chip
Research and Early Development,	<u>Tim Kaden</u>	Lisa Chakrabarti	<u>Yiling Yang</u>
Cardiovascular, Renal and	Dynamic42 GmbH; Institute of	Control of Chronic Viral Infections	Life Science Technologies
Metabolism (CVRM), PioPharmacouticals P&D	Biochemistry II, Jena University	Group, Virus ana Immunity Unit, Institut Pastour, Universitó de Paris	Department, IMEC, Leuven, Beigium
AstraZanaca Gothanburg Swadan	Hospital, Sena, Germany	CNPS Paris Erança	
and Cambridge UK		CIVILS, 1 uris, 1 runce	
Regular Talk 4A-2 14:30 -14:50	Regular Talk 4B-2 14:30 -14:50	Regular Talk 4C-2 14:30 -14:50	Regular Talk 4D-2 14.30 -14.50
Granh-based descriptors of Multi-	Role of Mechanical Stimulation	Clostridioides difficile infection in a	Multimodal non-invasive readouts
Electrode Array signals from	Using an In vitro Beating Chip in	C2BBe1 gut-on-chip	combining metabolic imaging and
human forebrain organoid with	microRNA-mediated	Maria Warschinke	Raman Spectroscopy in a Heart on
autism disorders	Reprogramming of Human	University Hospital Jena, Institute of	Chip
Arianna Mencattini	Cardiac Fibroblasts into Induced	Biochemistry I, Jena, Germany	Teresa Baldissera
Department of Electronic	Cardiomyocytes		Institute of Biomedical Engineering,
Engineering, University of Rome Tor	Valeria Chiono		Department for Biomedical
vergata, Rome, Italy	Department of Mechanical and		Technologies & Regenerative
	Aerospace Engineering, Politecnico		Medicine, Eberhard Karls
	di Torino, Torino, Italy		University of Tubingen, Tubingen,
Pecular Tells 4A 2 14:50 15:10	Pagular Tall 4P 2 14:50 15:10	Pagular Talk 4C 2 14:50 15:10	Begular Talk 4D 2 14:50 15:10
Advancing Cellular Snatiotemnoral	Understanding nathological	Human Uterine Cervix-on-Chin to	Airway-on-Chin Breathomics in
Monitoring: Multi-Electrode	implications of exercise in LMNA	Study Cervical Infection and	respiratory disease: relating in
Impedance Spectroscopy Enhanced	patients using a 3D hiPSC-CM	Cancer Adrian Weghofer	vitro to in vivo expirate
Through Machine Learning	disease model	Department for Microphysiological	Brady Rae
Manuel Carrasco Yagüe	Carla Cofiño Fabres	Systems, Eberhard Karls University	University of Groningen, University
LadHyX, CNRS, Ecole	Department of Applied Stem Cell	Tübingen, Germany; NMI, University	Medical Center Groningen GRIAC
Polytechnique, Institut Polytechnique	Technologies, TechMed Centre,	of Tübingen, Reutlingen, Germany	Research Institute, The Netherlands
de Paris, Paris, France; Sensome,	University of Twente, Enschede, The		
Massy, France	Netherlands.		
Regular Talk 4A-4 15:10 -15:30	Regular Talk 4B-4 15:10 - 15:30	Regular Talk 4C-4 15:10 -15:30	Regular Talk 4D-4 15:10 -15:30
An OsteoChondral-Unit-on-Chip to Unrevel the Machana Bathalagy of	Functional measurements in hiPSC derived vescular smooth	dependent quorum sensing	with sensor arrays to physioxia –
Ostoogrthritis	muscle colls of HTNR patients and	regulates biofilm formation of	A tool for 5D cell culture assays
Andrea Mainardi	controls and pharmacological	Vibrio cholerge in a 3D-gut-on-chin	Christoph Grün
Department of Biomedicine	intervention with PDE3A inhibitor	infection model	Institute of Functional Interfaces
University of Basel & University	cilostazol	Adrian Feile	Karlsruhe Institute of Technology.
Hospital Basel, Basel Switzerland	Tessa de Vries	Institute of Biochemistry II,	Karlsruhe, Germany
*	Division of Vascular Medicine and	University Hospital Jena, Jena,	
	Pharmacology, Department of	Germany; Cluster of Excellence	
	Internal Medicine, Erasmus	Balance of the Microverse, Friedrich	
	University Medical Center,	Schiller University Jena, Jena,	
	Rotterdam, The Netherlands	Germany	
	Coffee 15:30	e break -16:00	
	Aula	Magna	
	Keynote: Bionic Human Microtissues in	Mechanism-Driven Drug Developmen	t
	Prof. Yaak	ov Nahmias	
	Grass Center for Bioengineering of	the Hebrew University of Jerusalem	
	16:00	-16:45	
	Prize ceremony an	d Closing Remarks	
	End of FUROOC	- 17:50 \$2024 Conference	

Poster session 1 Thursday, 04/07/2024

Improved immunofluorescence protocol to support co-localization studies of ASO-receptor interactions	T-001
New non-invasive, label-free monitoring approach for 2D and 3D cell culture	T-002
Miguel Silva	
Advanced Pathophysiology Mimicking Lung Models for Accelerated Drug Discovery Wojcjech Chrzanowski	T-004
Control of molecular diffusion in hydrogel-on-chip	T-005
Optical pH sensor array integration in Organ-On-Chip by means of stereolithographic technique	T-006
Need of the hour: Global harmonisation of policies and standards for MPS devices Monica Piergiovanni	T-007
Large-Scale Manufacturing Of Foil-Based Microfluidic Chips For Neuron Cell Culture And Axon Outgrowth Monitoring	T-008
Lung organoid-on-chip models to study respiratory infections	T-009
Depletion of vascular endothelial growth factor (VEGF) prevents cancer cell extravasation in vitro Karin Farab Schmid	T-010
Advancing Precision Imaging for 3D Organoids-on-Chip: A Novel Lightsheet Microscopy Approach with Comprehensive Vascular Network Assessment	T-011
Camille Laporte Microfluidic modeling of beterogeneous tumour microenvironments to investigate cancer cell invasion	T-012
Simone Smink	1-012
Thermoplastic Liver-on-Chip integrating an electrospun membrane for dynamic administration of cancer-derived vesicles	T-013
Maria Testa	
Generation of a functional, vascularized, fibroblast-populated connective tissue hydrogel within a multi-organ-chip: proof-of-concept wound healing model	T-014
Jonas Jäger Linveiling Animal Method Riss: Overcoming Parriers to Clobal Adoption of Non-Animal Based Approaches in	T-015
Biomedical Research	1-015
Human 3D in vitro models for the assessment of Cancer Immunotherapy Mode of Action	T-016
Maria Kiratzis	
Vascularized pancreatic islet-on-chip for type 1 diabetes	T-017
Incorporation of iPSCs into reconstructed human gingiva enhances phenotype of gingival epithelium	T-018
Lisa-Lee Brueske	T 010
Samy Gobaa	1-019
The broad spectrum antiviral Molnupiravir inhibits human norovirus and rotavirus in 3D human intestinal enteroids Joana Rocha-Pereira	T-020
Advancing 3D Neural Tissue Models: Innovative Biomaterials and Electroconductive Hydrogels	T-021
Construction and visualization of 3D micro-vascular network in microfluidic based BBB chip	T-022
Satoshi Fujita Transient Membranes for Vascularized Brain Organoids	T-023
Elena Aprea Idionathic Pulmonary Fibrosis Modeling on a Lung-on-Chin with Flexible FCM Membrane and in-vivo-size Alveoli Array	T-024
Tobias Weber A new microfluidic cartridge to prepare non-viral gene delivery complexes	T-024
Giovanni Protopapa	
Artificial Intelligence to investigate the breast-to-bone metastasis on a chip Michele D'Orazio	T-026
Integration and optimisation of electrical impedance sensors in Organ-On-Chip for monitoring of organoids viability	T-027
Insight on Bacterial Meningitis Using a Neurovascular-Unit-on-a-Chip	T-028
Rossana Rauti Cost-Effective Manufacturing of Microphysiological Systems	T-029
Albert van Breemen	
Hoffa's Fat Pad on Chip: Advancing Adipose Tissue Modeling for Degenerative Joint Disease Studies Carolina Serrano Larrea	T-030
Overcoming barriers to live-cell imaging of stretched cells David Jaworski	T-031

Microphysiological model to investigate cellular senescence in vascular dysfunction at the onset and during progression of neurodegenerative diseases	T-032
Francesca Michela Framotion Characterizing biomarkers for early diagnosis of pancreatic cancer Flora Clement	T-033
Light assisted 3D printing of Microfluidic Devices: Development of Organ-on-chip models for studying cancer metastasis in lymphatic vessels – laser bioprinting applications Maria Anna Chliara	T-034
Modelling the complexity of the pancreas in a perfusable in vitro lumen model to study the initiation of Pancreatic Ductal Adenocarcinoma Pierre Caullet	T-035
Elucidation of the metabolism of dehydrochloromethyltestosterone, a doping agent, in human skin and liver using a co- culture microphysiological chip model	T-036
Development of an Intestinal Fibrotic Tissue module for the SMART Organ-on-Chip plate	T-037
Spatially resolved TEER suggest non-uniform differentiation in a Human Microbial Crosstalk gut-on-chip model	T-038
TumOC – a tumour organoid-on-chip device for real-time measurements of drug impact Maria Flackbar	T-039
A Transwell-Based Approach Incorporating Primary Cells and Organoids for Mimicking Villus Morphogenesis in Human Small Intestine	T-040
Mells Asal 3D in vitro Blood Brain Barrier (BBB) -on-a-Chip Model	T-041
Begum Gokçe A three-dimensional vagina-on-a-chip model for clinical research on bacterial vaginosis	T-042
Shuai Qiao Novel thiol-ene bioreactor with inkjet-printed oxygen sensors for hypoxia control in Organs-on-a-chip	T-043
Denise Marrero Signaling pathways activated by migraine mediator CGRP and mechanosensitive Piezo1 channels in human iPSCs- CD31+ cells	T-044
Vasiliki Gkouzioti Patient-Derived Lung Alveolar Epithelial Cells from Organoids Cultured and Stretched on an Innovative Lung-on-Chip	T-045
Platform	
Revolutionizing Breast Cancer Research: Unveiling Novel OOC Technologies to emulate the In-vivo Micro-environment.	T-046
Aya Aly Blood perfused Vessels-on-Chip show endothelial dysfunction after perfusion with CAR-T Tumor-on-Chip effluent	T-047
Huub Weener Comparative analysis of small molecule sorption in OOC devices from different materials and fabrication methods	T-048
Karlis Grindulis Chemoattraction of neural progenitors on a chip	T-049
Ha Anh Tran DigiBoCs: A New Horizon in Predictive Modeling for Brain-Targeted Therapeutics	T-050
Martin Raasch A breathing lung-on-chip for inhalation toxicology and safety assessment	T-051
Daniel Gutierrez The use of microfluidic devices to study the effect of extracellular matrix composition in the phenotype of Tumoral Pancreatic Organoids	T-052
Iván Cortés Domínguez An on-chip model of flow-induced vascular remodeling	T-053
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