

Day 1: 29 September 2022 | Thursday

10:50 – 11:00 Welcome: ECTORS – the way forward

Chair: Marlies Reinders | Rotterdam, The Netherlands

**11:00 – 12:30 Session 1:
From basic science to clinical practice**

Chairs: Marlies Reinders | Rotterdam, The Netherlands
Cees van Kooten | Leiden, The Netherlands

11:00 – 11:20 Liver regeneration: transplantation and machine perfusion Jeroen de Jonge | Rotterdam, The Netherlands

11:20 – 11:40 Immune monitoring after cellular and perfusion therapies Cees van Kooten | Leiden, The Netherlands

11:40 – 12:00 Discussion panel

12:00 – 12:10 [OP01] *withdrawn*

12:10 – 12:20 [OP02] ASSESSING THE QUALITY OF DONOR KIDNEYS DURING NORMOTHERMIC MACHINE PERFUSION USING NANOPARTICLE-BASED VITALITY SENSORS Jesper Staulund | Aarhus, Denmark

12:20 – 12:30 [OP03] EFFECTS OF FECAL MICROBIOTA TRANSPLANTATION ON CHRONIC KIDNEY DISEASE: AN INNOVATIVE APPROACH Gianvito Caggiano | Bari, Italy

12:30 – 13:30 LUNCH BREAK

13:30 – 14:00 Moderated Poster (1)

Chairs: Jan Czogalla | Hamburg, Germany

13:30 – 13:35	[POS01] CORONARY ALLOGRAFT VASCULOPATHY IS ASSOCIATED WITH DECREASED CD34+ PERIPHERAL CELL COUNT IN PATIENTS AFTER HEART TRANSPLANTATION	Gregor Poglajen Ljubljana, Slovenia
13:35 – 13:40	[POS02] EARLY PHASE CLINICAL TRIALS USING BIO-ARTIFICIAL ORGAN TECHNOLOGY: A SYSTEMATIC REVIEW OF ETHICAL ISSUES	Dide de Jongh Rotterdam, The Netherlands
13:40 – 13:45	[POS03] THE ROLE OF THE COMPLEMENT SYSTEM IN LIVER ISCHAEMIA REPERFUSION INJURY	Balaji Mahendran Newcastle, United Kingdom
13:45 – 13:50	[POS04] PREDICTION OF VESSEL OCCLUSION DURING RECELLULARIZATION USING A COMPUTATIONAL FLUID DYNAMICS MODEL	Van Lap Nguyen Tokyo, Japan
13:50 – 13:55	[POS05] ORGAN VIABILITY ASSESSMENT WITH IMAGING MEASUREMENT TECHNOLOGY DURING MACHINE PERFUSION FOR PORCINE LIVER DONATED AFTER CARDIAC DEATH	Hiromichi Obara Hachioji, Japan
13:55 – 14:00	[POS06] EFFECT OF PERFUSATE COMPOSITION DURING LONG-TERM PERFUSION OF LIVERS USING A PRECISION-CUT LIVER SLICE MODEL	Julia Hofmann Innsbruck, Austria

**14:00 – 15:30 Session 2:
Evaluation of therapeutic interventions and organ quality**

Chairs: Sandra Lindstedt | Lund, Sweden
Marco Eijken | Aarhus, Denmark

14:00 – 14:20	Deep molecular profiling of kidney normothermic machine perfusion: towards discovering therapeutic opportunities	Jan Czogalla Hamburg, Germany
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14:20 – 14:40	Liver and kidney	Peter Olinga Groningen, The Netherlands
14:40 – 15:00	Discussion panel	
15:00 – 15:10	[OP04] INHIBITION OF THE ACTIVIN-SIGNALING PATHWAY DURING EX-VIVO NORMOTHERMIC MACHINE PERFUSION AS A NOVEL THERAPY IN KIDNEY TRANSPLANTATION	Thomas Weiss Aarhus Denmark
15:10 – 15:20	[OP05] HUMAN TRANSPLANT KIDNEYS ON NORMOTHERMIC MACHINE PERFUSION DISPLAY ENDOCRINE ACTIVITY	Hui Lin Rotterdam, The Netherlands
15:20 – 15:30	[OP06] NEUTROPHIL EXTRACELLULAR TRAPS REMOVAL DURING EX VIVO LUNG PERFUSION IMPROVES LUNG FUNCTION IN A PORCINE LUNG INJURY MODEL	Margareta Mittendorfer Lund, Sweden
15:30 – 16:00	COFFEE BREAK & MOVE TO ERASMUS MC	

16:00 – 17:30 **Parallel Session 3: Laboratory sessions (at ERASMUS MC)**

Chairs:	Monique Verstegen Rotterdam, The Netherlands Martin Hoogduijn Rotterdam, The Netherlands	
Group 1:	Organ reconditioning laboratory	Monique Verstegen Rotterdam, Netherlands
Group 2:	Kidney organoid culture laboratory	Sander Korevaar Rotterdam, Netherlands
Group 3:	iPSC core facility	Mehrnaz Ghazvini Rotterdam, Netherlands
Group 4:	Lung organoids laboratory	TBC
Group 5:	Heart cells culturing laboratory	Heleen van Beusekom Rotterdam, Netherlands

16:00 – 17:30 **Parallel Session 3:
Science Round Table**

Chairs: Stan Benjamins | Groningen, The Netherlands

Moderators: Jorke Willemse
 Stef Luijmes
 Puck Groen
 Efrayim Kucukerbil



In several small groups, young professionals and experienced researchers will discuss important topics related to (transplantation) science. Among others, we will discuss Diversity-Equity-Inclusion (DEI), combining science and family, career planning, grant writing and performing science abroad. The sessions will start with a short round of introductions, followed by a moment to share experiences on the specific topic to be discussed. Discussion leaders will provide guidance for a vibrant discussion, aiming for equal input from both the young professionals and more experienced peers.

TOPIC 1: Diversity-Equity-Inclusion (DEI)

TOPIC 2: Career planning and performing science abroad

TOPIC 3: Innovative ideas and grant writing

17:30 – 18:30 **Networking reception**

Day 2: 30 September 2022 | Friday

**09:00 – 10:30 Session 4:
Combining machine perfusion with cellular therapies**

Chairs: Sarah Hosgood | Cambridge, United Kingdom
Bojan Vrtovec | Ljubljana, Slovenia

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| 09:00 – 09:20 | Machine perfusion and the application of MSC | Bente Jespersen Aarhus, Denmark |
| 09:20 – 09:40 | Kidney machine perfusion and extracellular vesicles, University of Bologna experience | Matteo Ravaioli Bologna, Italy |
| 09:40 – 10:30 | Discussion panel | |

10:30 – 11:00 COFFEE BREAK

**11:00 – 12:30 Session 5:
New players in organ regeneration**

Chairs Marcella Franquesa | Badalona, Spain
Marten Engelse | Leiden, The Netherlands

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| 11:00 – 11:20 | Renal regeneration and extracellular matrix | Nuno Neves Braga, Portugal |
| 11:20 – 11:40 | From an in vivo to an ex vivo engraftment strategy in islet transplantation | Lorenzo Piemonti Milan, Italy |
| 11:40 – 12:00 | Discussion Panel | |
| 12:00 – 12:10 | [OP07] DECELLULARIZED HUMAN VEINS AS MODEL FOR VASCULAR REPAIR AND ENDOTHELIAL CELL CHIMERISM IN ORGAN TRANSPLANTATION | Hector Tejeda Mora Rotterdam, The Netherlands |
| 12:10 – 12:20 | [OP08] DNA VECTOR-INDUCED EPO-OVEREXPRESSION IN KIDNEY ORGANOID INCREASE HEMATOCRIT LEVELS | Zhaoyu Du Rotterdam, The Netherlands |
| 12:20 – 12:30 | [OP09] A BIOENGINEERED VASCULARIZED SPLEEN MATRIX AS AN ENDOCRINE NEO-PANCREAS | Louis Maistriaux Louvain, Belgium |

12:30 – 13:30 LUNCH BREAK

13:30 – 14:00 Moderated Poster (2)

Chairs: Fotios Sampaziotis | Cambridge, United Kingdom

13:30 – 13:35	[POS07] CREATING A KIDNEY ORGANOID-VASCULATURE INTERACTION MODEL USING A NOVEL ORGAN-ON-CHIP SYSTEM.	Amanda Bas-Cristóbal Menéndez Rotterdam, The Netherlands
13:35 – 13:40	[POS08] MODELLING KIDNEY FIBROSIS IN HUMAN KIDNEY ORGANOIDS	Shengbing Li Rotterdam, The Netherlands
13:40 – 13:45	[POS09] <i>withdrawn</i>	
13:45 – 13:50	[POS10] THE LNCRNA HOTAIR CONTROLS THE SELF-RENEWAL, CELL SENESCENCE, AND SECRETION OF ANTIAGING PROTEIN A-KLOTHO IN HUMAN ADULT RENAL PROGENITOR CELLS	Gianvito Caggiano Bari, Italy
13:50 – 13:55	[POS11] INTRAPORTAL HUMAN ALLOGENEIC MESENCHYMAL STEM CELLS INFUSION FOR POSTHEPATECTOMY LIVER FAILURE PREVENTION: THE PILOT CASE SERIES EXPERIENCE	Denis Efimov Minsk, Belarus
13:55 – 14:00	[POS12] HIGH THROUGHPUT PRODUCTION OF EXTRACELLULAR VESICLES (EVS) FROM IMMORTALIZED WHARTON'S JELLY MESENCHYMAL STROMAL CELLS (IWJ-MSC) (EVS)	Sergio Garcia Garcia Badalona, Spain

**14:00 – 15:30 Session 6:
Tools for repairing organs**

Chair: Bojan Vrtovec | Ljubljana, Slovenia
Martin Hoogduijn | Rotterdam, The Netherlands

14:00 – 14:20	New approaches for kidney disease modeling and tissue regeneration	Christos Xinaris Bergamo, Italy
14:20 – 14:40	Cardiovascular regenerative medicine in the clinical setting	Giulio Pompilio Milano, Italy
14:40 – 15:00	Tracking of administered cells	Patricia Murray Liverpool, United Kingdom
15:00 – 15:30	Discussion Panel	