

**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
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11:20 – 11:40	Immune monitoring after cellular and perfusion therapies	Cees van Kooten   Leiden, The Netherlands
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11:40 – 12:00	Discussion panel	
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12:00 – 12:10	[OP01] MESENCHYMAL STROMAL CELLS IMMUNOMODULATE WITH MINIMAL EFFECT ON CLINICAL STATE OF RENAL TRANSPLANT PATIENTS	Aruna Rakha   Chandigarh, India
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12:10 – 12:20	[OP02] ASSESSING THE QUALITY OF DONOR KIDNEYS DURING NORMOTHERMIC MACHINE PERFUSION USING NANOPARTICLE-BASED VITALITY SENSORS	Jesper Staulund   Aarhus, Denmark
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12:20 – 12:30	[OP03] EFFECTS OF FECAL MICROBIOTA TRANSPLANTATION ON CHRONIC KIDNEY DISEASE: AN INNOVATIVE APPROACH	Gianvito Caggiano   Bari, Italy
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12:30 – 13:30	LUNCH BREAK	
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**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 Benjamens | Groningen, The Netherlands



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.

**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 NEOPANCREAS  | Louis Maistriau   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] COMPARISON OF THE EFFECTIVENESS OF THE TOTAL RNA AND APOPTOTIC BONE MARROW CELLS USING ON REGENERATIVE PROCESSES IN THE LIVER	Nina Onishchenko   Moscow, Russia
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	Fabio Sallustio   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



# ESOT ECTORS 3<sup>rd</sup> MEETING

29-30 September 2022

**ROTTERDAM**  
The Netherlands

#ESOT\_ECTORS #ECTORSmeeting

## SCIENTIFIC PROGRAMME

14:40 – 15:00 Tracking of administered cells

Patricia Murray |  
Liverpool, United  
Kingdom

15:00 – 15:30 Discussion Panel