

Day 1: 15 May 2022 | Sunday

15:00 – 17:30 Pre-Workshop: Single Cell Multimodal Omics?

Chairs: Anita Chong | Chicago, United States
 Janine Altmüller | Berlin, Germany

15:00 – 15:20 Multimodal single-cell approaches shed light on T-cell heterogeneity Ricardo Ferreira | Oxford, United Kingdom

15:20 – 15:40 Single-cell multi-omics profiling to understand disease progression cell-by-cell Matthias Farlik | Vienna, Austria

15:40 – 16:00 Questions and discussion

16:00 – 16:30 COFFE BREAK

16:30 – 16:50 Monitoring genetic stability by single-cell sequencing Ashley D. Sanders | Berlin, Germany

16:50 – 17:10 Single nucleotide sequencing Christian Conrad | Berlin, Germany

17:10 – 17:30 Discussion panel with all speakers

Day 2: 16 May 2022 | Monday

08:20 – 08:30 **Opening: Official Welcome to the ITS 2022**

Anita Chong | Chicago, United States
 Faddi Issa | Oxford, United Kingdom
 Nina Pilat | Vienna, Austria

08:30 – 10:30 **Session 1: B cells, Protective and Pathogenic Antibodies**



Chairs: Cees van Kooten | Leiden, The Netherlands
 TBA

08:30 – 08:50	Current strategies targeting B cells in autoimmunity	Thomas Dörner Berlin, Germany
08:50 – 09:10	Intragraft antibody responses in human cardiac allograft vasculopathy	Emmanuel Zorn New York, United States
09:10 – 09:30	Implementation and impact of assessing alloreactive memory B cells in kidney transplantation	Oriol Bestard Barcelona, Spain
09:30 – 09:37	[OP07] CHANGES OF IMMUNOGLOBULIN E-RECEPTOR POSITIVE CELL SUBSETS AFTER CARDIAC ALLOGRAFT REJECTION IN MICE	Anna Marianne Weijler Vienna, Austria
09:37 – 09:44	[OP08] A NOVEL IMMUNOSUPPRESSIVE COMPOUND (79-6) THAT TARGETS BCL6 PREVENTS THE HUMORAL ALLORESPONSE	Rens Kraaijeveld Rotterdam, The Netherlands
09:44 – 09:51	[OP09] CIRCULATING AND INTRAGRAFT DONOR(HLA)-SPECIFIC B CELLS DRIVE ALLOGRAFT REJECTION AFTER KIDNEY TRANSPLANTATION	Alba Torija Hospitalet de Llobregat, Spain
09:51 – 10:30	Discussion panel with all speakers	
10:30 – 11:00	COFFEE BREAK	

11:00 – 12:30 **Session 2:
Big Data and Artificial Intelligence**



Chairs: Maria Kaisar | Oxford, United Kingdom
 Xunrong Luo | Durham, United States

11:00 – 11:20	Genomic-related bioinformatics applications	Sophie Limou Nantes, France
11:20 – 11:40	Machine learning in clinical transplantation	Katie Connor Edinburgh, United Kingdom
11:40 – 12:00	Big data and artificial intelligence in liver transplantation	Ali Zarrinpar Gainesville, United States
12:00 – 12:30	Discussion panel with all speakers	

12:30 – 14:00 LUNCH BREAK | POSTER VIEWING

13:00 – 13:30 **Moderated e-Poster Session 1
[POSTER AREA]**

Chairs: TBA

13:00 – 13:05	[POS26] SINGLE CELL ALLOREACTIVE TCR REPERTOIRE PROFILING	Moumita Paul-Heng Sydney, Australia
13:05 – 13:10	[POS33] DONOR-SPECIFIC HYPORESPONSIVENESS FOLLOWING KIDNEY TRANSPLANTATION EXPLAINED BY LOSS OF DONOR-REACTIVE POLYFUNCTIONAL CD4+ EFFECTOR MEMORY T CELLS	Amy van der List Rotterdam, Netherlands
13:10 – 13:15	[POS34] DYNAMIC OF DONOR DERIVED CELL-FREE DNA AFTER PANCREAS TRANSPLANTATION	Maria José Ramírez-Bajo Barcelona, Spain
13:15 – 13:20	[POS39] NON-INVASIVE METABOLITE-BASED URINE SIGNATURE DETECTS OVER-IMMUNOSUPPRESSION IN RENAL TRANSPLANT RECIPIENTS.	Dirk Kuypers Leuven, Belgium

13:20 – 13:25	[POS40] NOVEL AVENUE OF ALLOGRAFT MONITORING: DIRECT MEASUREMENT OF DONOR-DERIVED EXTRACELLULAR VESICLES IN HUMAN PLASMA	Wouter Woud Rotterdam, Netherlands
13:25 – 13:30	[POS45] TISSUE BIOENERGETICS DURING THE EARLY PHASE OF NORMOTHERMIC MACHINE PERFUSION OF THE LIVER PREDICTS CLINICAL OUTCOME AFTER TRANSPLANTATION	Andras T. Meszaros Innsbruck, Austria

14:00 – 15:30 **Session 3:
Innate Immunity**

Chairs: Katja Kotsch | Berlin, Germany
 Cees van Kooten | Leiden, The Netherlands

14:00 – 14:20	Lymph node fibroblastic reticular cells steer immune responses	Jonathan S Bromberg Baltimore, United States
14:20 – 14:40	Innate lymphoid cells	Andreas Diefenbach Berlin, Germany
14:40 – 14:47	[OP14] OCCURRENCE OF VIRAL INFECTIONS MAY BE PREDICTED BY LONGITUDINAL MONITORING OF TORQUE-TENO VIRUS IN PEDIATRIC KIDNEY TRANSPLANT PATIENTS	Fabian Eibensteiner Vienna, Austria
14:47 – 14:54	[OP 15] COMPLEMENT SYSTEM ACTIVATION IN BRAIN DEATH AND THE EFFECT OF LUMINAL INTESTINAL PRESERVATION	Marc Weiss Aarhus, Denmark
14:54 – 15:30	Discussion panel with all speakers	

15:30 – 16:00 COFFEE BREAK

16:00 – 17:30 **Session 4: DISCUSSION PANEL**
Scientific Leadership in Transplantation 

Chairs: Caroline Dudreuilh | London, United Kingdom
TBA

Discussion panel on:

- Career challenges
- Value of mentorship
- Do's and don'ts while doing PhD

Anita Chong | Chicago,
United States

Andreas Zuckermann |
Vienna, Austria

*All participants are invited to watch a movie prior to the meeting.
We wish to use it as a base for discussion.
Movie: "Picture a scientist" available on streaming platform Netflix.*

Liset Pengel | Oxford,
United Kingdom

Fadi Issa | Oxford,
United Kingdom

17:30 – 18:30 **Networking Event** 

18:00 – 18:30 **Moderated e-Poster Session 2**
[POSTER AREA]

Chairs: TBA

18:00 – 18:05 [POS46] A PIG CROSS-CIRCULATORY PLATFORM FOR MONITORING AND MODULATING THE INNATE RESPONSES IN LUNG GRAFTS. Matthieu Glorion | Suresnes, France

18:05 – 18:10 [POS47] CHARACTERISING THE PROTEOME OF PERFUSATE FROM HUMAN KIDNEYS UNDERGOING HYPOTHERMIC PERFUSION IN THE CLINIC: INSIGHT INTO PROTECTIVE MECHANISMS? John Mulvey | Oxford, United Kingdom

18:10 – 18:15 [POS59] SINGLE-NUCLEUS RNA SEQUENCING IDENTIFIES CONSERVED TRANSCRIPTIONAL PROGRAMS IN MOUSE- AND PIG MODELS OF CELL-FREE NORMOTHERMIC MACHINE PERFUSION Jan Czogalla | Hamburg, Germany

18:15 – 18:20	[POS61] CHIMERISM AND BIDIRECTIONAL ALLORESPONSES IN PATIENTS RECEIVING LUNG TRANSPLANTATION	Jianing Fu New York, United States
18:20 – 18:25	[POS68] HUMORAL RESPONSE TO 3 AND 4 DOSES OF MRNA COVID-19 VACCINE IN KIDNEY TRANSPLANT RECIPIENTS WITHOUT PRIOR SEROCONVERSION	Clara Brandstetter Linz, Austria
18:25 – 18:30	[POS80] VALIDATION OF THE OPTIMAL TT VIRUS RANGE FOR RISK STRATIFICATION OF GRAFT REJECTION AND INFECTION IN KIDNEY TRANSPLANT RECIPIENTS BY TTV R-GENE®	Frederik Haupenthal Vienna, Austria

Day 3: 17 May 2022 | Tuesday

**08:30 -10:00 Session 5:
Marginal organs and ex-vivo machine perfusion**

Chairs: Georg Lurje | Berlin, Germany
TBA

08:30 – 08:50 Improving outcomes in liver transplantation with HOPE Zoltan Czigany | Aachen, Germany

08:50 – 09:10 Pumping kidneys as a solution for everything? Cyril Moers | Groningen, The Netherlands

09:10 – 09:30 Silencing HLA expression through ex vivo machine perfusion Constanca Figueiredo | Hannover, Germany

09:30 – 09:37 [OP 16] EXTRACELLULAR VESICLE SUBSETS RELEASED DURING NORMOTHERMIC MACHINE PERFUSION ARE ASSOCIATED WITH HUMAN KIDNEY CHARACTERISTICS Wouter Woud | Rotterdam, The Netherlands

09:37 – 09:44 [OP 17] LIVER NORMOTHERMIC MACHINE PERFUSION SUPPORTS TRANSLATION AND MITOCHONDRIAL FUNCTION AND REDUCES DEGRADATION AND METABOLIC IMBALANCE Maria Letizia Lo Faro | Oxford, United Kingdom

09:44 – 09:51 [OP 18] REMOVAL OF NEUTROPHIL EXTRACELLULAR TRAPS DURING EX VIVO LUNG PERFUSION SHOWS IMPROVEMENT OF LUNG FUNCTION IN A PORCINE LUNG INJURY MODEL Margareta Mittendorfer | Lund, Sweden

09:51 – 10:30 Discussion panel with all speakers

10:30 – 11:00 COFFEE BREAK

**11:00 – 12:30 Session 6:
Mechanisms of alloimmunity and tolerance**

Chairs: Marisa Alegre | Chicago, United States
 Elke Eggenhofer | Regensburg, Germany

- | | | |
|---------------|---|--------------------------------------|
| 11:00 – 11:20 | The holy grail of (central) tolerance:
Generation of MHC/peptide ligands for T cell repertoire selection | Ludger Klein Munich, Germany |
| 11:20 – 11:40 | Selective co-stimulation blockade with antagonist anti-CD28 therapeutics in transplantation | Gilles Blancho Nantes, France |
| 11:40 – 11:47 | [OP 19] GPR109A ACTIVATION IN HUMAN REGULATORY MACROPHAGES ENHANCES INDUCED TREG GENERATION | Laura Cordero Regensburg, Germany |
| 11:47 – 11:54 | [OP 20] INTRINSIC TISSUES FACTORS PREDISPOSE SUSCEPTIBILITY OF ISCHEMIA-REPERFUSION INJURY BY INFLUENCING THE RECRUITMENT OF TREGS INTO KIDNEY ALLOGRAFTS | Zheng Zhang Chicago, United States |
| 11:54 – 12:30 | Discussion panel with all speakers | |

12:30 – 14:00 LUNCH BREAK | POSTER VIEWING

13:00 – 14:00 SATELLITE SYMPOSIUM

**14:00 – 15:30 Session 7:
COVID-19 – immunological response to vaccination**

Chairs: Anita Chong | Chicago, United States
 Katja Kotsch | Berlin, Germany

- | | | |
|---------------|---|--------------------------------|
| 14:00 – 14:20 | SARS-CoV2 vaccination of adolescent and adult kidney transplant recipients: outcomes after different approaches based on comprehensive humoral-, B- and T cell analysis | Arne Sattler Berlin, Germany |
|---------------|---|--------------------------------|

14:20 – 14:40	Low-Avidity CD4 + T Cell Responses to SARS-CoV-2 in Unexposed Individuals and Humans with Severe COVID-19	Petra Bacher Kiel, Germany
14:40 – 14:47	[OP21] THREE-DOSE COURSE OF MRNA-1273 COVID-19 VACCINE IN KIDNEY TRANSPLANT RECIPIENTS; EVOLUTION OF CELLULAR AND HUMORAL IMMUNITY	David Cucchiari Barcelona, Spain
14:47 – 14:54	[OP22] B CELL COMPOSITION IS ALTERED AFTER KIDNEY TRANSPLANTATION AND TRANSITIONAL B CELLS CORRELATE WITH SARS-COV-2 VACCINATION RESPONSE	Max Schuller Graz, Austria
14:54 – 15:01	[OP 23] ASSESSING SARS-COV-2-SPECIFIC ADAPTIVE IMMUNITY TO PREDICT SEROCONVERSION AFTER MRNA-BASED VACCINATION IN SOT	Laura Donadeu Barcelona, Spain
15:01 – 15:30	Discussion panel with all speakers	

15:30 – 16:00 COFFEE BREAK

**16:00 – 17:00 Session 8:
Keynote lecture**

Chairs: Jonathan Bromberg | Baltimore, United States

16:00 – 16:45 Single cell profiling of myeloid cell in health and disease Florent Ginhoux | Singapore

16:45 – 17:00 Q&A session

**17:00 – 18:00 Session 9:
You make us look good... (Patients are the real heroes)**

Chairs: Jonathan Bromberg | Baltimore, United States
TBA

Session will focus on looking at the specific case seen from perspective of surgeon and his patient after heart transplantation.

Patient: Milos Nikolic | Belgrade, Serbia

Surgeon: Andreas Zuckermann | Vienna, Austria

Day 4: 18 May 2022 | Wednesday

**08:30 – 10:00 Session 10:
Basic mechanisms of organ regeneration & organoids**



Chairs: Elke Eggenhofer | Regensburg, Germany
 Bill Scott | Newcastle, United Kingdom

08:30 – 08:50	Organoids and liver regenerative medicine	Luc van der Laan Rotterdam, The Netherlands
08:50 – 09:10	Kidney organoids	Nuria Montserrat Barcelona, Spain
09:10 – 09:17	[OP 10] DE NOVO SIX2 ACTIVATION IN HUMAN KIDNEYS TREATED WITH NEONATAL KIDNEY STEM/PROGENITOR CELLS DURING NORMOTHERMIC MACHINE PERFUSION	Fanny Arcolino Leuven, Belgium
09:17 – 09:24	[OP 11] ADMINISTRATION OF MESENCHYMAL STROMAL CELLS TO REJECTED DONOR LUNGS RESULTS IN REGENERATION AND REDUCTION OF PRIMARY GRAFT DYSFUNCTION	Anna Niroomand Lund, Sweden
09:24 – 09:31	[OP 12] AIF-1 DEFICIENCY PROMOTES REPAIR OF ISCHEMIC KIDNEYS BY REPROGRAMMING RESIDENT MACROPHAGES FOR EFFEROCYTOSIS	Irma Husain Durham, United States
09:31 – 09:38	[OP 13] 17B-ESTRADIOL AND METHYLPREDNISOLONE ASSOCIATION AMELIORATES LUNG INFLAMMATION AFTER BRAIN DEATH IN FEMALE RATS	Marina Vidal-dos-Santos Sao Paulo, Brazil
09:38 – 10:00	Discussion panel with all speakers	

10:00 – 10:30 COFFEE BREAK

**10:30 – 12:00 Best Abstracts Session
 "A star is born"**

Chairs: Marisa Alegre | Chicago, United States
 Megan Sykes | New York, United States

10:30 – 10:42	[OP 01] TARGETED DELIVERY OF GALUNISERTIB SUPPRESSES FIBROGENESIS IN AN INTEGRATED EX VIVO RENAL TRANSPLANT AND FIBROSIS MODEL	Leonie van Leeuwen Groningen, The Netherlands
10:42 – 10:54	[OP 02] IMPLICATION OF CD8+ CELLS IN TREG MEDIATED SKIN GRAFT SURVIVAL	Romy Steiner Vienna, Austria
10:54 – 11:06	[OP 03] RENAL-RESIDENT INNATE LYMPHOID CELLS TYPE 2 ARE LOST FOLLOWING RENAL TRANSPLANTATION AND ARE NOT RESTORED AFTER THERAPEUTIC IL-33 TREATMENT	Linda Marie Laura Thole Berlin, Germany
11:06 – 11:18	[OP 04] REGULATORY T CELLS SUPPRESS MEMORY IL-17A PRODUCTION IN HIGHLY SENSITISED PATIENTS WITH END-STAGE RENAL DISEASE	Caroline Dudreuilh London, United Kingdom
11:18 – 11:30	[OP 05] THE ROLE OF CHIMERIC ANTIGEN RECEPTOR (CAR) VERSUS ENDOGENOUS CO-STIMULATION IN THE FUNCTION OF ALLOANTIGEN-SPECIFIC TREGS	Isaac Rosado-Sánchez Vancouver, Canada
11:30 – 11:42	[OP 06] TRANSITIONAL-1 B CELL IL-10/TNFA RATIO RISK-STRATIFIES RENAL TRANSPLANT PATIENTS WITH EARLY BORDERLINE CHANGE	Aravind Cherukuri Pittsburgh, United States
11:42 – 12:00	Discussion with all speakers	

12:00 – 12:30 BREAK (LIGHT LUNCH)

**12:30 – 14:00 Session 11:
Biobanks and Bioassays**

Chairs: Maria Kaiser | Oxford, United Kingdom
 Nina Pilat | Vienna, Austria

12:30 – 12:50	Quality in Organ Donation and Transplantation. From clinical samples to whole organs bioresource	Sarah Cross Oxford, United Kingdom
12:50 - 13:10	The alloreactive T cell repertoire	Megan Sykes New York, United States
13:10 – 13:30	Bioassays to determine activity of extracellular matrix remodelling can contribute to an accurate prognosis in kidney transplant recipient	Federica Genovese Herlev, Denmark
13:30 – 14:00	Discussion panel with all speakers	

14:00 – 14:30 AWARDS CEREMONY & CLOSING