



1st - 4th of December 2025

Hotel Savoyen, Vienna, Austria

FINAL PROGRAMME

31st Annual Meeting

of the International Society of Mechanical Circulatory Support

SCHEDULE

MONDAY, 1st December, 2025				TUESDAY, 2nd December, 2025	
Pre-Meeting Day & Board Meeting (Registration: 07:00-18:00)				Registration: 07:00 - 18:00 Exhibition: 09:00 - 18:00	
	Ludwig (morning) Eugenio (afternoon)	Turin + Paris + Wien	Olympia Mancini 1 + 2	Olympia Mancini 1 + 2	
07:00					
07:30					
08:00				OPENING CEREMONY	
08:30				Helmut Reul Award Session	
09:00				Coffee Break & Poster Exhibition	
09:30	ISMCS Executive Board Meeting	ICCAC MCS Bootcamp	Heart Hackathon Introduction & Session I	Symposium #1: Lost in Transition: Navigating the MCS Spectrum	
10:00					
10:30				Heart Hackathon Session II	
11:00					
11:30				Lunch Symposium - Abbott	
12:00	Lunch Break			Oral Session 1: In-Vitro Evaluation and Preclinical Innovations I	
12:30					
13:00	ISMCS Board Meeting	ICCAC VAD Coordinator Session I	Heart Hackathon Session III	Mini Oral Session 1: Short- and Long-Term MCS: Clinical Management and Outcomes	
13:30				Coffee Break & Poster Session	
14:00		Key Note Lecture: Stavros Drakos, MD, PhD			
14:30		ICCAC VAD Coordinator Session 2	ISMCS Young Investigator Symposium	Symposium 2: Interdisciplinary Cardiac Recovery	
15:00					
15:30					
16:00					
16:30					Oral Session #2: User-Centered Design and Human Factors in MCS Devices
17:00	Workshop: Key Aspects in preclinical MCS Device development	Heart Hackathon Review/Conclusion			
17:30					
18:00					
18:30					
19:00					
19:30					
20:00				Welcome Reception - Josephinum	
20:30					
21:00					
21:30					
22:00					

	Registration	Exhibition hours
1st December 2025	07.00 - 18.00	
2nd December 2025	07.00 - 18.00	09.00 - 18.00
3rd December 2025	07.00 - 18.00	09.00 - 18.00
4th December 2025	07.00 - 17.00	09.00 - 17.30

31st Annual Meeting of the International Society of Mechanical Circulatory Support

WEDNESDAY, 3rd December, 2025	THURSDAY, 4th December, 2025	
Registration: 07:00 - 18:00 Exhibition: 09:00 - 18:00	Registration: 07:00 - 17:00 Exhibition: 09:00 - 16:00	
Olympia Mancini 1 + 2	Olympia Mancini 1+2	
Breakfast Symposium - Medtronic	Breakfast Symposium - BrioHealth BV	07:00
		07:30
		08:00
Oral Session 3: CFD Modelling and Simulation	Oral Session 5: Clinical Applications & Patient Management	08:30
		09:00
		09:30
Break & Poster Exhibition	Coffee Break & Poster Exhibition	10:00
		10:30
Symposium 3: Durable MCS Reimagined: Prognostics, Diagnostics & Therapies Off the Beaten Track	Symposium 5: Progress and Challenges in Pediatric MCS	11:00
		11:30
Lunch Symposium - J&J MedTech	Lunch Symposium - Shenzhen Core Medical	12:00
		12:30
Oral Session 4: In-Vitro Evaluation and Preclinical Innovations II	Mini Oral Session 3 - Hemocompatibility and Heart/Pump Interaction	13:00
		13:30
Mini Oral Session 2 - Heart Hackathon	Oral Session 6: MCS Engineering and Preclinical Testing	14:00
		14:30
Coffee Break & Poster Session	Break & Poster Exhibition	15:00
		15:30
Symposium 4: Bridging the Gap: Advances in Temporary Mechanical Circulatory Devices	MCS Industry Update Session	16:00
		16:30
		17:00
		17:30
ISMCS General Assembly	CLOSING CEREMONY	18:00
		18:30
		19:00
		19:30
Gala Dinner - Hotel Savoyen		20:00
		20:30
		21:00
		21:30
		22:00

Stay up to date with the program, speakers, and live updates directly on your phone.

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PROGRAMME

Monday, 1st December 2025

07:45 - 10:00 HEART HACKATHON: INTRODUCTION & SESSION I

07:45 - 08:15 Arrival with Coffee and Tea

08:15 - 08:30 **Session Introduction: Overview, Highlights, Format for the Day**
Madhumitha Dhamodarasamy (Australia) and Shaun Gregory (Australia)

08:30 - 08:50 **S1.1 UC Biomed**
University of Caterbury, New Zealand

08:50 - 09:10 **S1.2 UNSW Mending Broken Heart**
University of New South Wales, Australia

09:10 - 09:30 **S1.3 CBU Cardiac Engineering Team**
California Baptist University, USA

09:30 - 09:50 **S.1.4 Mahidol CardiaTech**
Mahidol University, Thailand

09:50 - 10:00 Discussion and Q/A

10:00 - 10:30 Break: Cultural Exchange & Morning Tea

10:30 - 12:00 HEART HACKATHON: SESSION II

10:30 - 10:50 **S2.1 QUT Heartbeates**
Queensland University of Technology, Australia

10:50 - 11:10 **S2.2 Team Bath Heart**
University of Bath, United Kingdom

11:10 - 11:30 **S2.3 Team KtaH**
KTH Royal Institute of Technology, Sweden

11:30 - 11:50 **S2.4 Heart Lab Vienna**
University of Applied Sciences Technikum Vienna, Austria

11:50 - 12:00 Discussion and Q/A

31st Annual Meeting

of the International Society of Mechanical Circulatory Support

TURIN + PARIS + WIEN

09:00 - 11:30

ICCAC MCS Bootcamp

The pre-meeting organized by the International Consortium of Circulatory Assist Clinicians (ICCAC) offers interactive education through case scenarios, conducted in a group setting and supplemented with hands-on experience to support training objectives.

Moderators: Andrew Woods (Newcastle), Sarah Schroeder (USA)

Faculty: Oliver Seibert (Austria), Valerie Eberlein (Austria), Sylvie Baudart (USA), Martina Socha (Austria), Shishir Kore (UK), Florian Müller (Germany), Janet Wu (USA), Samantha Keener (UK), Daniel Timms (USA)

Topics: HeartMate 3 (Abbott), Berlin Heart EXCOR (Berlin Heart), Impella (J&J MedTech), Xenios ECMO console (Fresenius Medical Care), Driveline Exit Site Best Practices, HVAD (Medtronic), VAD Ultrasound (POCUS), BiVACOR TAH (BiVACOR Inc.)

12:00 - 13:00

Lunch Break
(joint for ICCAC MCS & Heart Hackathon)
>> FOYER + MANCINI 3

OLYMPIA MANCINI 1 + 2

13:00 - 14:30

HEART HACKATHON: SESSION III

13:00 - 13:20

S3.1 Team Monash Heart Hack
Monash University, Melbourne, Australia

13:20 - 13:40

S2.5 Durham Heart Team
University of Durham, United Kingdom

13:40 - 14:00

S3.3 MAVIS
University of Medicine and Pharmacy „Grigore T. Popa“, Iasi, Romania

14:00 - 14:20

S3.4 Team Alberta Heart
University of Alberta, Alberta, Canada

14:20 - 14:30

Discussion and Q/A

13:00 - 14:30

**ICCAC VAD COORDINATOR SESSION 1:
LONG-TERM OUTCOMES POST DURABLE LVAD:
PERSPECTIVES ACROSS THE GLOBE**

Moderators: Sarah E. Schroeder (USA), Oliver Seibert (Austria)

13:00 - 13:15

**Prehab-Rehab: The Benefits and Challenges of Therapy Interventions
before Implant**

Janet Wu, The University of California San Francisco, USA

13:15 - 13:30

**There's More to Quality of Life than Adverse Outcome Prevention:
Discovering VAD Patient Expectations**

Sarah E Schroeder, Bryan Heart, USA

13:30 - 13:45

**Intimacy and Sexual Desire: The Importance of Guiding Safe and Healthy
Sexual Relationships following VAD Implant**

Florian Müller, UKS Homburg, Germany

13:45 - 14:00

**Technology Anxiety and Device Dependence: Strategies to Enable Thriving
Adaptation**

Shishir Kore, Manchester University Hospital, United Kingdom

14:00 - 14:15

**The Dreaded Germ: Exploring Novel Approaches to Preventing and Treating
VAD Infections**

Desiree Robson, St. Vincent's Hospital Sydney, Australia

14:15 - 14:30

**Navigating the Clinical Landscape of External Outflow Graft Obstruction:
How Do We Find it and What Do We Do Next**

Andrew Woods, Freeman Hospital, Newcastle upon Tyne, United Kingdom

14:30 - 15:00

**Coffee Break (joint for ICCAC, Heart Hackathon and ISMCS yInvestigators)
>> FOYER + MANCINI 3**

15:00 - 16:45

**ICCAC VAD COORDINATOR SESSION 2: TEAM-BASED
APPROACHES TO POST-DURABLE LVAD CARE: IT TAKES A VILLAGE**

Moderators: Samantha Keener (USA), Florian Müller (Germany)

15:00 - 15:15

The Role of the LVAD Coordinator: What the Future Holds

Anne Marie Oppelaar, UMC Utrecht, The Netherlands

15:15 - 15:30

**Global Perspectives on Social Support Evaluation: Do Caregivers Really
make a Difference and Should Drug Users be Implanted?**

Valerie Eberlein, Medical University of Vienna, Austria

15:30 - 16:00

Debate: The Use of Temporary Support pre-VAD: Friend of Foe?

*PRO: Andrew Woods, Freeman Hospital, Newcastle upon Tyne, UK
CON: Sarah E Schroeder, Bryan Heart, USA*

16:00 - 16:15

**Pre-Implant Planning and Discharge Interventions: A Coordinator-Driven
Strategy for Improved Outcomes**

Sylvie Baudart, The University of California San Francisco, USA

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TURIN + PARIS + WIEN

16:15 - 16:45	Technological Advances for MCS Therapy - A Coordinator's Dream and the Sky's the Limit:
16:15 - 16:30	The VAD Coordinator Perspective <i>Volker Lauernroth, HDZ NRW, Bad Oeynhausen, Germany</i>
16:30 - 16:45	The Engineering Perspective <i>Friedrich Kaufmann, Deutsches Herzzentrum der Charité (DHZC), Germany</i>

OLYMPIA MANCINI 1+2

14:30 - 18:30	ISMCS YOUNG INVESTIGATOR SYMPOSIUM <i>Moderators: Libera Fresiello (The Netherlands), Steven Jacobs (Belgium), Theodor Abart (Austria), Ana Martins Costa (The Netherlands)</i>
14:30 - 15:00	Welcome and Coffee Foyer Gathering of all participants in the open Lunch Area; Network & Connect
15:00 - 16:00	Pitch your Research - Introduction <i>The aim of this session is to provide a smooth, low-threshold introduction and networking opportunity for participants. The concept is a 3-minute presentation with one static slide, introducing the researcher and their main research focus.</i>
16:00 - 17:15	Keynote Session
16:00 - 16:25	Striving in Academia - the pathway(s) to success - Prof. Jutta Arens <i>Prof. Jutta Arens is a professor at the University of Twente, The Netherlands, specializing in oxygenators and membrane technology. In her keynote, she will share insights from her exciting career and highlight how success does not always follow a straight path.</i>
16:25 - 16:50	Bridging Clinical and Academic Research - Prof. Steven Jacobs <i>Prof. Steven Jacobs from Belgium's largest university hospital, UZ Leuven, is a cardiac surgeon by training who successfully combines his clinical duties with translational research in the field of MCS. In his keynote, he will share how to not only balance a clinical and academic career but merge them to excel in both.</i>
16:50 - 17:15	Failure as a way to Success in Industry - Dr. Roland Graefe <i>Dr. Roland Graefe graduated as a Mechanical Engineer from Aachen and oversaw the R&D efforts on the ReinVAD, where he faced the challenges of translating excellent research projects into the MedTech market. He is now Director of Engineering at BiVACOR Inc. and has played a key role in developing the first centrifugal TAH</i>

17:15 - 17:30 Short Break - Transition of yInvestigators to Workshop Room Turin + Paris + Wien

17:30 - 18:30

**Workshop: Key Aspects in preclinical MCS
Device development**

Preclinical evaluation and development of MCS devices is a highly complex and multifactorial process. In this workshop, experts from different methodological fields will discuss current approaches, challenges, and opportunities, as well as the role their methods will play in advancing future MCS research and innovation.

Table 1: Hemodynamics & Physiological Control

Libera Fresiello (University of Twente)

Shaun Gregory (Queensland University of Technology)

Table 2: Biocompatibility & Hemocompatibility

Jutta Arens (University of Twente)

Marcus Granegger (Medical University of Vienna)

Table 3: Quality of Life & Usability

Cara Wrigley (University of Queensland),

Thomas Schlöglhofer (Medical University of Vienna)

Table 4: In-Vivo Testing

Steven Jacobs (UZ Leuven)

Christoph Nix (J&J Medtech)

Table 5: Computational Methods (CFD, Simulation)

Roland Graefe (BiVACOR Inc.)

Benjamin Torner (Medical University of Vienna)

17:30 - 18:30

HEART HACKATHON: REVIEW AND CONCLUSION

17:30 - 18:00

Review of the Heart Hackathon Workshop

Madhumitha Dhamodarasamy (Queensland University of Technology, Australia),

Tharusha Perera (Heart Hackathon Lead)

18:00 - 18:30

Award Session and Close

- Judges Reflections

- Sponsors Reflections

- Awards (Note: Award Winners also Announced at Gala Dinner)

18:30 - 19:30

free time, gathering for dinner (leaving for dinner 19:30 in the lobby)

PROGRAMME

Tuesday, 2nd December 2025

08:00 - 08:30

OPENING CEREMONY

Conference President: Daniel Zimpfer (Austria)
ISMCS President: Shaun Gregory (Australia)
ISMCS Past President: Heinrich Schima (Austria)

08:30 - 09:30

HELMUT REUL AWARD SESSION

*Moderators: Libera Fresiello (The Netherlands), Jamshid Karimov (USA),
Georg Wieselthaler (KSA)*

08:30 - 08:40

Chronic In Vivo Analysis of a Smart LVAD Inlet Cannula

Karl Bohnenberger, Penn State College of Medicine, USA

08:40 - 08:50

Hydrodynamic Impact of Flexible Blades in Left Ventricular Assist Devices

Shweta Karnik, Georgia Institute of Technology & Emory University, USA

08:50 - 09:00

Cold Atmospheric Plasma Treatment in LVAD-Associated Driveline Infections: A New Frontier in Care

Hebe Al Asadi, Medical University of Vienna, Austria

09:00 - 09:10

Pediatric High Intuitive Framework (PHIF): Usability Architecture for Pediatric Ventricular Assist Devices

Ori Baer, Cornell University, Ithaca, USA

09:10 - 09:20

Clinical Utility of the Impella 5.5 Fiber Optic Sensor for Real-Time Pressure Monitoring in Cardiogenic Shock

Lukas Ruoff, Medical University of Vienna, Austria

09:20 - 09:30

Outflow Graft-to-Root Bypass as an Alternative Strategy for Aortic Root Thrombosis After HeartMate 3

Yuki Tadokoro, National Cerebral and Cardiovascular Center, Suita, Japan

09:30 - 10:00

Coffee Break & Poster Exhibition
>> FOYER & MANCINI 3

10:00 - 11:30

**SYMPOSIUM 1: LOST IN TRANSITION:
NAVIGATING THE MCS SPECTRUM**

*Moderators: Sascha Ott (Germany), Günther Laufer (Austria),
Claudius Mahr (USA)*

10:00 - 10:15

The First Beat: ECMO as a Bridge-When, Why, and What Next?

Roxana Moayedifar, Medical University of Vienna, Austria

10:15 - 10:30

Impella 5.5 Best Practices: The Fine Line Between Support and Optimal Unloading

Alexander Bernhardt, University Hospital Hamburg-Eppendorf, Germany

10:30 - 10:45

When Short Isn't Enough: Indicators for Transitioning to Long-Term MCS

Manreet Kanwar, University of Chicago Medicine, USA

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OLYMPIA MANCINI 1 + 2

- 10:45 - 11:00 **Long-Term MCS: Choosing the Right Device and the Right Moment**
Claudius Mahr, Medical City Healthcare, Dallas, USA
- 11:00 - 11:15 **Escalating or De-escalating: How and When to Pivot Therapy**
Antonio Loforte, University of Turin, Italy
- 11:15 - 11:30 **From Crisis to Control: Building an MCS Algorithm That Works**
Jasmin Hanke, Hannover Medical School, Germany

- 11:30 - 12:30 LUNCH SYMPOSIUM SPONSORED BY ABBOTT**
Moderators: Julia Riebandt (Austria), Alexander Bernhardt (Germany)

OLYMPIA MANCINI 1 + 2

- 11:30 - 11:45 **Treatment of right heart failure after LVAD implantation**
Alexander Bernhardt, University Hospital Hamburg-Eppendorf, Germany
- 11:45 - 12:00 **TEAM-HF: Transforming Advanced Heart Failure Management Through Early Intervention**
Linda van Laake, UMC Utrecht, The Netherlands
- 12:00 - 12:15 **From Exit Site to Outcome: The ASPIRE Perspective on Driveline Care**
Thomas Schlöglhofer, Medical University of Vienna, Austria
- 12:15 - 12:30 **LVAD Therapy Redefined: Achieving Net Survival Gains in Heart Failure**
Anne-Celine Martin, Hospital European Georges, Paris

- 12:30 - 14:00 ORAL SESSION 1:**
IN-VITRO EVALUATION AND PRECLINICAL INNOVATIONS I
Moderators: Isabell Esslinger (Germany), Heinrich Schima (Austria), Toru Masuzawa (Japan)
- 12:30 - 12:45 **A Control-Free, Large-Gap, Thrust-Based Impeller Levitation in a Ventricular Assist Device**
Wataru Hijikata, Institute of Science Tokyo, Japan
- 12:45 - 13:00 **Static and Dynamic Performance Evaluation of the Axial-Gap Maglev Motor for Centrifugal LVAD**
Nobuyuki Kurita, Baylor College of Medicine, Texas Children's Hospital, Houston, USA
- 13:00 - 13:15 **An Interlaboratory Study for the In Vitro Investigation of the Hemodynamic Performance of LVAD Technology**
Libera Fresiello, University of Twente, The Netherlands
- 13:15 - 13:30 **A Novel Sensor for Catheter-Free, Real-Time Left Ventricular Function Monitoring: Results from a Pilot Study in Swine**
Max Haberbusch, Medical University of Vienna, Austria

OLYMPIA MANCINI 1 + 2

- 13:30 - 13:45 **Novel Technique of Indocyanine Green Fluorescence Imaging in Extracorporeal Membrane Oxygenation**
Tatsuki Fujiwara, Institute of Science Tokyo, Japan
- 13:45 - 14:00 **A Co-Pulse Synchronized Aortic Pressure Generation Method in Resting Mode of Ex Vivo Heart Perfusion**
Daisuke Sakota, National Institute of AIST, Tsukuba, Japan
- 14:00 - 14:50 **MINI ORAL SESSION 1: SHORT- AND LONG-TERM MCS: CLINICAL MANAGEMENT AND OUTCOMES**
Moderators: Sarah Schroeder (USA), Steven Jacobs (Belgium), Martin Bernardi (Austria)
- 14:00 - 14:06 **Evaluation of Hemolysis and Its Impact on Renal Dysfunction During Impella CP Support Using Plasma-Free Hemoglobin**
Taiji Inamori, Saiseikai Kumamoto Hospital, Kumamoto, Japan
- 14:07 - 14:13 **Prognostication in Cardiogenic Shock: The Role of EHR Data and Micro-Axial Flow Pump Analytics**
Thomas Schlöglhofer, Medical University of Vienna, Austria
- 14:14 - 14:20 **Impact of Combined Use of VA-ECMO and Impella (ECPELLA) on Short-Term Mortality in Patients with Cardiogenic Shock Receiving VA-ECMO - A Single Center Retrospective Cohort Study Using Propensity Score Matching**
So Hirata, Saiseikai Kumamoto Hospital, Kumamoto, Japan
- 14:21 - 14:27 **RP Flex Utilization for Right Ventricular Support and Cardiogenic Shock: Single Center Experience**
Ioana Dumitru, Tampa General Hospital, USA
- 14:28 - 14:34 **Left Ventricular Assist Device Outflow Graft Pulsed Wave Doppler as a Tool to Derive Flow Waveforms**
Ricardo Deveza, St. Vincent's Hospital Sydney, Australia
- 14:35 - 14:41 **Modeling Hemodynamic Stability in LVAD Patients: A Machine Learning Framework Combining Clinical and Pump-Derived Data in the ICU**
Antonio Mosca, Medical University of Vienna, Austria
- 14:42 - 14:48 **Towards Caregiver-Free Home Management of LVAD Therapy: A Clinical Study of ICT-Based Home LVAD Care Supported by Community Healthcare**
Shunsuke Saito, The University of Osaka, Japan
- 14:50 - 15:30 **COFFEE BREAK & POSTER SESSION**
>> FOYER & MANCINI 3

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15:30 - 17:30

KEY NOTE LECTURE AND SYMPOSIUM 2: INTERDISCIPLINARY CARDIAC RECOVERY

*Moderators: Manreet Kanwar (USA), Stavros Drakos (USA),
Marcus Granegger (Austria)*

15:30 - 16:00

Keynote

Advancing the Science of Myocardial Recovery with Mechanical Circulatory Support

Stavros Drakos, Utah Medical Center, Utah, USA

16:00 - 16:15

Recovery Pathways: Decommissioning vs. Explantation Strategies

Anne-Kristin Schaefer, Medical University of Vienna, Austria

16:15 - 16:30

The Role of the Right Ventricle in Cardiac Recovery with LVADs

Michael Bonios, Onassis Cardiac Surgery Center, Athens, Greece

16:30 - 16:45

Monitoring of Cardiac Function during LVAD support

Christopher Hayward, St. Vincent's Hospital Sydney, Australia

16:45 - 17:00

Promoting Cardiac Recovery by Optimizing Cardiac Mechanics with MCS

Marcus Granegger, Medical University of Vienna, Austria

17:00 - 17:15

Predictors of Myocardial Recovery and Device Explantation in Children Supported with Berlin Heart EXCOR

Valerii Iaprintsev, The Royal Children's Hospital, Melbourne, Australia

17:15 - 17:30

Panel Discussion

17:30 - 18:30

ORAL SESSION 2: USER-CENTERED DESIGN AND HUMAN FACTORS IN MCS DEVICES

*Moderators: Julia Riebandt (Austria), Cara Wrigley (Australia)
Desiree Robson (Australia)*

17:30 - 17:45

Co-Designing Critical MCS Device Communication in Emergency Departments

Cara Wrigley, Queensland University of Technology, Australia

17:45 - 18:00

Usability of the BiVACOR Total Artificial Heart Peripherals for Outpatients: Insights from a Simulation Study

Katharina Missoni, Medical University of Vienna, Austria

18:00 - 18:15

Feature Selection for Mechanical Circulatory Support Devices: Required vs. Desirable Elements of Platform Technology Design

Ifan Yen, magAssist, Suzhou, China

18:15 - 18:30

A Portable, Comprehensive ECMO Insertion Pack Kit for Intra-Hospital and Mobile Cannulation

Salim Olia, University of Pennsylvania, Philadelphia, USA

20:00 - 22:30

Welcome Reception

Josephinum

Historical building and Medical History Museum Vienna Tour in the Heart of Vienna.

Located at: Währinger Straße 25 · 1090 Wien

Pick-up point: RENNWEG stop, Tram line 71 heading into town

Please note! No waiting for late passengers

Departure time: 7:15 p.m., 7:20 p.m.

PROGRAMME

Wednesday, 3rd December 2025

07:00 - 08:30

**BREAKFAST SYMPOSIUM BY MEDTRONIC:
STAYING ALIVE: BEST PRACTICES ON
MANAGING HVAD PATIENTS FOR THE LONG-HAUL**

*Moderators: Sylvie Baudart (USA), Christopher Hayward (Australia),
Thomas Schlöglhofer (Austria)*

07:00

Breakfast

07:30 - 07:45

**Prevention and management of driveline infections to maintain
continuity of HVAD outpatient care**

Florian Müller, UKS Homburg, Germany

07:45 - 08:00

Maintaining optimal pump parameters in HVAD patients over time

Oliver Seibert, Medical University of Vienna, Austria

08:00 - 08:15

Staying Fit! Why physical activity matters in long-term HVAD patients

Desiree Robson, St. Vincent's Hospital Sydney, Australia

08:15 - 08:30

Myocardial Recovery in HVAD patients

Andrew Woods, Freeman Hospital, Newcastle upon Tyne, United Kingdom

08:30 - 10:00

**ORAL SESSION 3:
CFD MODELLING AND SIMULATION**

*Moderators: Tomohiro Nishinaka (Japan), Christoph Nix (Germany),
Francesco Moscato (Austria)*

08:30 - 08:45

Blood Trauma of Blood Pumps Under Realistic Hemodynamic Conditions

Benjamin Torner, Medical University of Vienna, Austria

08:45 - 09:00

**Drainage Cannula Choice Impacts Risk of Complications During
VA ECMO: An In Silico Analysis**

Avishka Wickramarachchi, Queensland University of Technology, Australia

09:00 - 09:15

**A Numerical Framework for Virtual Trials in Pediatric Heart Failure:
A Proof-of-Concept Study**

Pauline Luger, Medical University of Vienna, Austria

09:15 - 09:30

**Computational Prediction of Hemolysis Incorporating Physiological
Models of the Red Blood Cell Membrane**

Nico Dirkes, RWTH Aachen University, Germany

09:30 - 09:45

**Towards the Design and Testing of an Impeller for a Novel Intra-Aortic Left
Ventricular Assist Device**

Luke Myhill, University of Bath, United Kingdom

09:45 - 10:00

PulmonART: A Novel Cardiac Support Device for Right Heart Failure

Manus Henry, Coventry University, United Kingdom

10:00 - 10:30

**BREAK & POSTER EXHIBITION
>> FOYER + MANCINI 3**

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10:30 - 12:00

SYMPOSIUM 3: DURABLE MCS REIMAGINED: PROGNOSTICS, DIAGNOSTICS & THERAPIES OFF THE BEATEN TRACK

Moderators: Linda van Laake (The Netherlands), Arjang Ruhparwar (Germany), Antonio Loforte (Italy)

10:30 - 10:45

Living Myocardial Slices: Walking The Path Towards Standardization

Linda van Laake, UMC Utrecht, The Netherlands

10:45 - 11:00

The Repair Revolution: Synergizing MCS with Regenerative Medicine

Shigeru Miyagawa, Osaka University, Japan

11:00 - 11:15

Artificial Intelligence-Driven Innovation in Health Care and MCS

Marvin Slepian, University of Arizona, USA

11:15 - 11:30

Exercise Response Phenotype Clustering in LVAD Patients Undergoing Cardiopulmonary Exercise Testing

*Rengin Sabaoğlu, UMC Utrecht, The Netherlands
(ISMCS 2024 Young Researcher Scholarship Winner)*

11:30 - 11:45

Cardio-Microcurrent Therapy for HFrEF: Findings from the C-MIC II Open-Label Randomized Controlled Trial

Eduardo Rame, Thomas Jefferson University, USA

11:45 - 12:00

MISSION-reBEAT Results: First-in-Human Clinical Investigation of the reBEAT Pulsatile, Biventricular MCS System Avoiding Blood Contact in Patients With Advanced Heart Failure

Christian H. Møller, Rigshospitalet, Copenhagen University, Denmark

12:00 - 13:00

LUNCH SYMPOSIUM SPONSORED BY J&J MEDTECH: THERAPY PATHWAYS AND TREATMENT OPTIONS WITH IMPELLA® HEART PUMP

Moderator: Robert Zilberszac (Austria)

12:00 - 12:15

Heart Recovery and Weaning Strategies with Impella

Roxana Moayedifar, Austria

12:15 - 12:30

ICU Management and Escalation-Strategies

Sascha Ott, Charite Berlin, Germany

12:30 - 12:45

DanGer Shock and Longterm Follow-Up of Patients

Amin Polzin, Heinrich Heine University, Germany

12:45 - 13:00

Panel Discussion



1st - 4th of December 2025

13:00 - 14:30

ORAL SESSION 4:

IN-VITRO EVALUATION AND PRECLINICAL INNOVATIONS II

Moderators: Ina Laura Perkins (Sweden), Eduardo Rame (USA), Kiyotaka Fukamachi (Japan)

13:00 - 13:15

Anticoagulants for Clot Prevention Under Static Whole Blood Conditions In Vitro: Heparin Is Not Superior to Direct Thrombin Inhibitor

Jun Teruya, Baylor College of Medicine, Houston, USA

13:15 - 13:30

Enhanced Endothelization and Hemocompatibility of Additively Manufactured Titanium Surface Architecture

Lingxiao Zeng, Monash University, Melbourne, Australia

13:30 - 13:45

Experimental Framework to Assess Impact of Pump Design on Haemocompatibility

Aldo Jose Suria Roldan, Medical University of Vienna, Austria

13:45 - 14:00

Pump Speed Modulation of Magnetically Levitated Pediatric Ventricular Assist Device

Yuki Nagasawa, Ibaraki University, Hitachi, Japan

14:00 - 14:15

Near-Expert-Level ECG Delineation in 7 ms: A Compact xLSTM-based Model for Edge Deployment

David Lung, Medical University of Vienna, Austria

14:15 - 14:30

Estimation of Patient Hemodynamics in a Magnetically Levitated Total Artificial Heart

Nicholas Greatrex, BiVACOR, Huntington Beach, USA

14:30 - 15:30

MINI ORAL SESSION 2: HEART HACKATHON

Moderators: Po-Lin Hsu (China), Madhumitha Dhamodarasamy (Australia), Shaun Gregory (Australia)

14:30 - 14:36

Investigating Valve And Sinus Geometry In Polymeric Valves for a Total Artificial Heart

Joshua Keenan, University of Bath, United Kingdom

14:37 - 14:43

In-Silico Verification of Anatomical Fitment for a Total Artificial Heart using V-Patients Software

Benjamin Iliev, CBUCE, USA

14:44 - 14:50

Computational Fluid Dynamics: Effects of Channel Impeller Width of the Double Bladeless Total Artificial Heart (DBL-TAH)

Chatchayapa Prayadrat, Mahidol University, Thailand

14:51 - 14:57

Design and Evaluation of an Emerging Lightweight, Core-Less Motor Topology and its Application in a Non-Centrifugal Device

Luke Hehir, Monash University, Australia

31st Annual Meeting

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OLYMPIA MANCINI 1 + 2	14:58 - 15:04	Surface Modification of Titanium Alloy by Anodisation to Improve Hemocompatibility <i>Natalie Widjaja, Sydney School of Mechanical Engineering, Australia</i>
	15:05 - 15:11	UV-Vis Spectrophotometric Analysis of Leachates From Materials Used in a Total Artificial Heart <i>Morgan Reed, University of Bath, United Kingdom</i>
	15:12 - 15:18	Heart Hackathon HeartLab Vienna <i>Leo Ballabani, University of Applied Science Technikum Vienna, Austria</i>
	15:19 - 15:25	Assessing Hemolysis in a Pulsatile Heart Pump Loop <i>Kathleen Nehrbass, CBU Cardiac Engineering, USA</i>
15:30 - 16:00 COFFEE BREAK & POSTER SESSION FOYER & MANCINI 3		
OLYMPIA MANCINI 1 + 2	16:00 - 17:30	SYMPOSIUM 4: BRIDGING THE GAP: ADVANCES IN TEMPORARY MECHANICAL CIRCULATORY DEVICES <i>Moderators: Avishka Wickramarachchi (Australia), Peter Schellongowski (Austria), Robert Dowling (USA)</i>
	16:00 - 16:15	Temporary Mechanical Circulatory Support in the Acute Setting: A Contemporary Device Landscape <i>Jamshid Karimov, Cardiovascular Innovation and Research, Cleveland, USA</i>
	16:15 - 16:30	Emerging Excellence: Extracorporeal Mechanical Circulatory Support in China - A National Update <i>Shu Chen, Wuhan Hospital, China</i>
	16:30 - 16:45	Microaxial-Flow Technology for High-Risk Percutaneous Coronary Intervention <i>Rui Wang, Zhongshan Hospital, China</i>
	16:45 - 17:00	J-PVAD Registry Insights: Evolving Trends in Impella Support Across Japan <i>Koichi Toda, Dokkyo University Saitama Medical Center, Japan</i>
	17:00 - 17:15	Future Directions of ECMO: An Engineering Perspective <i>Jutta Arens, University of Twente, The Netherlands</i>
	17:15 - 17:30	Future Directions of ECMO: A Clinical Perspective <i>Lars Mikael Broman, Karolinska Institute, Sweden</i>
18:00 - 19:00 ISMCS GENERAL ASSEMBLY		
19:30 - 20:00 AWARD SESSION >> OLYMPIA MANCINI 1 + 2		
20:00 - 22:00 GALA DINNER >> RESTAURANT		

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PROGRAMME

Thursday, 4th December 2025

07:00 - 08:30

BREAKFAST SYMPOSIUM BY BRIOHEALTH BV:

**UNDERSTANDING BEARING TECHNOLOGIES IN CONTEMPORARY
DURABLE ROTARY BLOOD PUMPS:
DEFINITIONS, PERFORMANCES, STANDARDS**

Moderators: Marvin Slepian (USA), Nobuyuki Kurita (USA)

Panel members: Kurt Dasse (USA), Toru Masuzawa (Japan),
Koichi Toda (Japan), Jon Wu (USA), John Woodard (Germany)

07:00

Breakfast

07:30 - 07:32

Welcome notes and meeting goals

Marvin Slepian, University of Arizona, USA

07:32 - 07:39

Evolution of bearing technologies in rotary blood pumps

James Antaki, Cornell University, USA

07:39 - 07:45

Stability of magnetic and hydrodynamic bearings

Chen Chen, Briohealth Solutions, USA

07:45 - 07:51

Bearing technology in Bivacor

Daniel Timms, BiVACOR Inc., USA

07:51 - 07:57

**Design of a fully magnetically levitated pump with axial-gap self-bearing
motor and permanent magnet stator**

Nobuyuki Kurita, Baylor College of Medicine, USA

07:57 - 08:03

Bearing technologies in CoreHeart 6

Shun Zhou Yu, Shenzhen Core Medical, China

08:03 - 08:10

**Pump design: Definition, Standardization and Performance –
Stakeholder, legal and ethical considerations.**

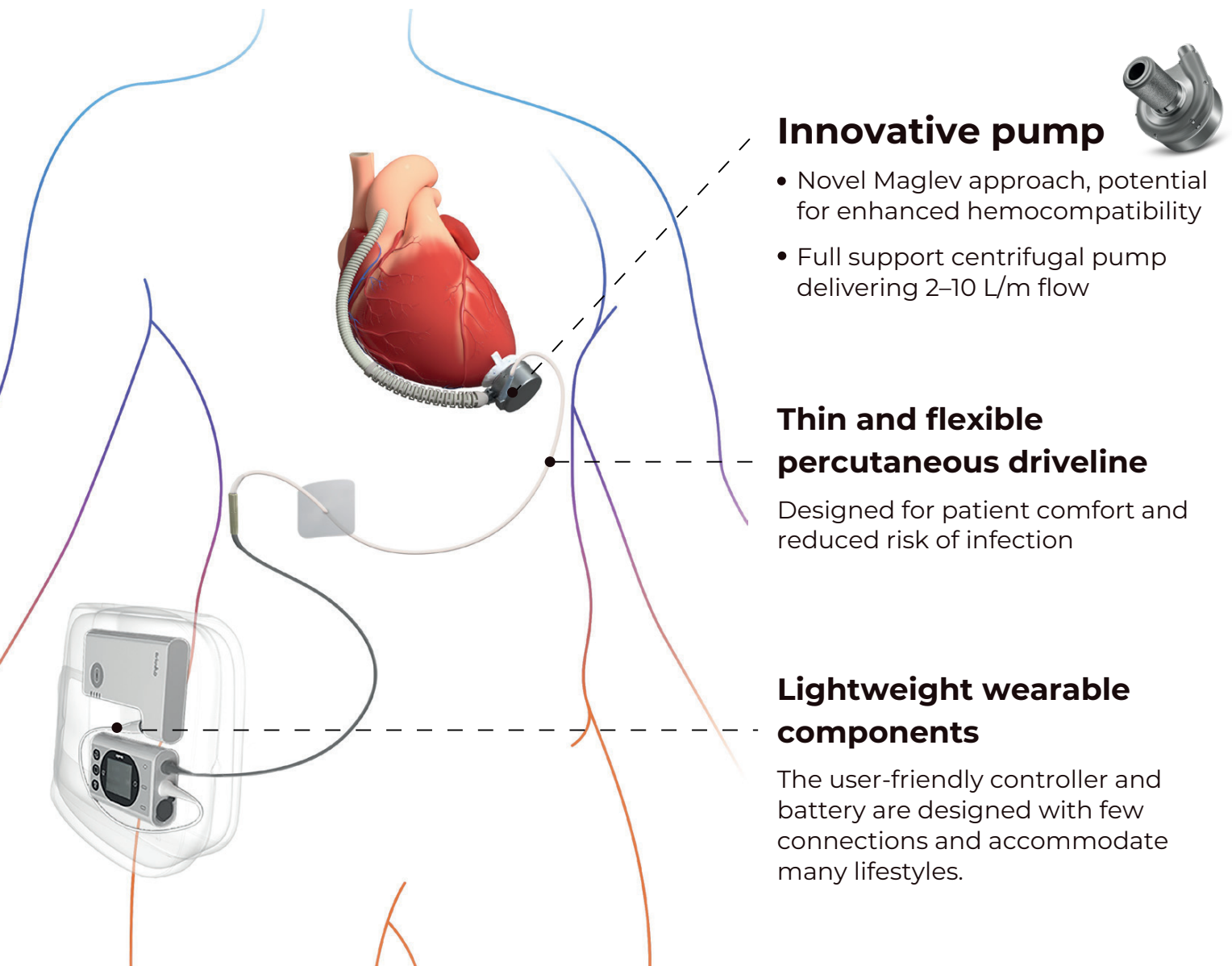
Marvin Slepian, University of Arizona, USA

08:10 - 08:30

Panel discussion with audience questions and comments

BrioVAD[®] System

The revolutionary BrioVAD[®] system, a fully magnetically levitated Left Ventricular Assist System (LVAS), is designed to help patients live a more vibrant life.



Innovative pump

- Novel Maglev approach, potential for enhanced hemocompatibility
- Full support centrifugal pump delivering 2–10 L/m flow

Thin and flexible percutaneous driveline

Designed for patient comfort and reduced risk of infection

Lightweight wearable components

The user-friendly controller and battery are designed with few connections and accommodate many lifestyles.

1. The BrioVAD[®] is the only fully magnetically levitated LVAD currently undergoing pre-market clinical investigation, limited by Federal (or United States) law.
2. The US INNOVATE Randomized Clinical Trial is currently enrolling patients.

08:30 - 10:00

**ORAL SESSION 5:
CLINICAL APPLICATIONS & PATIENT MANAGEMENT**

*Moderators: Roxana Moayedifar (Austria), Koichi Toda (Japan),
Marvin Slepian (USA)*

08:30 - 08:45

**Associated Factors for Successful Cardiac Recovery with
Berlin Heart Excor in Pediatric Patients with Dilated Cardiomyopathy**
Motoki Komori, The University of Osaka, Japan

08:45 - 09:00

Early Aortic Root Thrombosis After LVAD Implantation: Risk Factor Analysis
Kota Suzuki, National Cerebral and Cardiovascular Center, Suita, Japan

09:00 - 09:15

First-In-Human Implantation of a Next-Generation Membrane-Based LVAD
Christopher Hayward, St Vincent's Hospital, Sydney, Australia

09:15 - 09:30

**Detection of Native Heart Contractility and Breathing Through Magnetic
Bearing Systems**
Nicholas Greatrex, BiVACOR, Huntington Beach, USA

09:30 - 09:45

**Standardizing Inflow Cannula Angle Measurements On Chest X-Ray For
LVAD Patients Using Ai-Guided Posture Correction**
János Imre Barabás, Semmelweis University, Budapest, Hungary

09:45 - 10:00

**The Effect of Orthostatic Transitions on LVAD Pump Flow and the
Association with Peak VO₂**
Maaïke Wösten, UMC Utrecht, The Netherlands

10:00 - 10:30

COFFEE BREAK & POSTER EXHIBITION
>> FOYER + MANCINI 3

10:30 - 12:00

**SYMPOSIUM 5:
PROGRESS AND CHALLENGES IN PEDIATRIC MCS**

Moderators: Katrin Lunze (Germany), Iki Adachi (USA), Daniel Zimpfer (Austria)

10:30 - 10:45

**Tailoring Surgical Strategies for Small Ventricles and Complex Congenital
Malformations**
Iki Adachi, Baylor College of Medicine, USA

10:45 - 11:00

**Networked for Impact: How ACTION Is Transforming Pediatric Heart Failure
and MCS Outcomes**
Angela Lorts, Cincinnati Children's Hospital Medical Center, USA

11:00 - 11:15

**PediPella: Redefining Pediatric Mechanical Circulatory Support for the
Smallest Hearts**
Bart Meyns, UZ Leuven, Belgium

11:15 - 11:30

Engineering the Future: Recent Progress on the NeoVAD
Katharine Fraser, University of Bath, United Kingdom

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11:30 - 11:45	PediaFlow™ Miniature MagLev Pediatric VAD: Path to Early Feasibility in Humans <i>James Antaki, Cornell University, USA</i>
11:45 - 12:00	Shaping the Future of Pediatric-Scaled Continuous-Flow Total Artificial Heart Technology <i>Kiyotaka Fukamachi, Kyushu University Graduate School of Medicine, Japan</i>

12:00 - 13:00	LUNCH SYMPOSIUM SPONSORED BY SHENZHEN CORE MEDICAL <i>Moderators: Daniel Zimpfer (Austria), Ming Gong (China)</i>
12:00 - 12:05	Opening
12:05 - 12:20	LV AD Therapy in China: Past, Present, and Future <i>Haibo Chen, Fuwai Hospital, Beijing, China</i>
12:20 - 12:35	LVAD Implantation plus Biobentall to treat end-stage heart failure induced by severe aortic valve insufficiency and aortic root aneurysm. <i>Xingyu Wang (China)</i>
12:35 - 12:50	Treatment of right heart failure after LVAD implantation <i>Alexander Bernhardt, University Hospital Hamburg-Eppendorf, Germany</i>
12:50 - 13:00	Discussion and Q/A

13:00 - 14:00	MINI ORAL SESSION 3: HEMOCOMPATIBILITY AND HEART/PUMP INTERACTION <i>Moderators: Aly El Banayosy (USA), Benjamin Torner (Austria), Sebastian Jansen (Germany)</i>
13:00 -13:06	A Novel Compliant Aortic Phantom Fabrication Method for Cardiovascular Device Testing <i>Connor Coughlan-Ward, Monash University, Melbourne, Australia</i>
13:07 - 13:13	Perfusion Performance Evaluation of a Maglev Centrifugal Pediatric VAD in Mock Circulation Loop <i>Masahiro Osa, Ibaraki University, Hitachi, Japan</i>
13:14 -13:20	A Miniaturized Rotary Blood Pump Adapted for Fontan Use in an Animal Model <i>Ryan Stanfield, University of Utah, Salt Lake City, USA</i>
13:21 - 13:27	Comparison of CFD and 4D Flow MRI Results in a Total Artificial Heart <i>Minu Bahrami, University of Bath, United Kingdom</i>
13:28 - 13:34	Quantitative Scoping Review of Mechanical Circulatory Support Devices Virtual Fitting: Unmet Needs and Proposed Solutions <i>Lorenzo Civilla, Medical University of Vienna, Austria</i>

13:35 - 13:41	The EMPEROR Total Artificial Heart: A Next-Generation, Fully-Implantable SynCardia Total Artificial Heart <i>Duffy Elmer, SynCardia Systems, Tucson, USA</i>
13:42 - 13:48	Initial Experience with a Novel Large-Animal Model of Ventricular Volume Overload <i>Philipp Aigner, Medical University of Vienna, Austria</i>
13:49 - 13:55	Innovative Accoustic Characterization of Heartmate 3 LVAD for remote monitoring: Preliminary results <i>Silvia Cannone, Politecnico di Torino, Turin, Italy</i>
14:00 - 15:30	ORAL SESSION 6: MCS ENGINEERING AND PRECLINICAL TESTING <i>Moderators: Nobuyuki Kurita (USA), Salim Olia (USA), Philipp Aigner (Austria)</i>
14:00 - 14:15	Reducing Power Consumption of Magnetic Levitation Motor by Zero-Power Control for Implantable Pediatric Ventricular Assist Devices <i>Ryoichiro Sato, Ibaraki University, Hitachi, Japan</i>
14:15 - 14:30	Innovative Left Atrial Unloading Device: Engineering and Preclinical Testing <i>Nicolas Anzellini, University of Denver, USA</i>
14:30 - 14:45	Hemodynamic Performance of the VIGOR SVAD in a HFpEF Mock Circulation Loop <i>Steven Tsui, Royal Papworth Hospital NHS Foundation Trust, United Kingdom</i>
14:45 - 15:00	Comparison of Platelet Adhesion on Different Hard Material Coatings and Bonding Agents for Ventricular Assist Devices in a Flow Chamber <i>Isabell Esslinger, German Heart Center of the Charité, Berlin, Germany</i>
15:00 - 15:15	Development of a Stented Inlet for Left Ventricular Assist Devices <i>Shobana Santhanam, Georgia Institute of Technology & Emory University, USA</i>
15:15 - 15:30	Limited Effect of Blade Profile Shape and Thickness on hydraulic Perfomance and Hemocompatibility in Rotodynamic Blood Pumps <i>Benjamin Torner, Medical University of Vienna, Austria</i>
15:30 - 16:00	COFFEE BREAK & POSTER EXHIBITION >> FOYER + MANCINI 3

31st Annual Meeting

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16:00 - 17:45

MCS INDUSTRY UPDATE SESSION

*Moderators: Katharine Fraser (United Kingdom),
Stephan Schueler (United Kingdom), Daniel Zimpfer (Austria)*

16:00 - 16:07

Abbott

Paul Newman (USA)

16:08 - 16:15

J&J MedTech

Sonya Bhavsar (USA)

16:16 - 16:23

Shenzhen Core Medical

Shun Zhou Yu (China)

16:24 - 16:31

BrioHealth Solutions

Piet Jansen (Netherlands)

16:32 - 16:39

Bravida Medical

David Moyer (USA)

16:40 - 16:47

ActiCare Health

Clint Brown (USA)

16:48 - 16:55

magAssist

Po-Lin Hsu (China)

16:56 - 17:03

Adtech Healthcare

Mary McGovern (United Kingdom)

17:04 - 17:11

CorWave

Rémi Pruvost (France)

17:12 - 17:19

Fresenius Medical Care

Torsten Rinne (Germany)

17:20 - 17:27

mps Microsystems

Eugen Bärwald (Germany)

17:28 - 17:35

BiVACOR

Daniel Timms (USA)

17:35 - 17:43

Virtonomy

Simon Sonntag (Germany)

17:45 - 18:00

Closing Ceremony & Farewell

Conference President: Daniel Zimpfer (Austria)

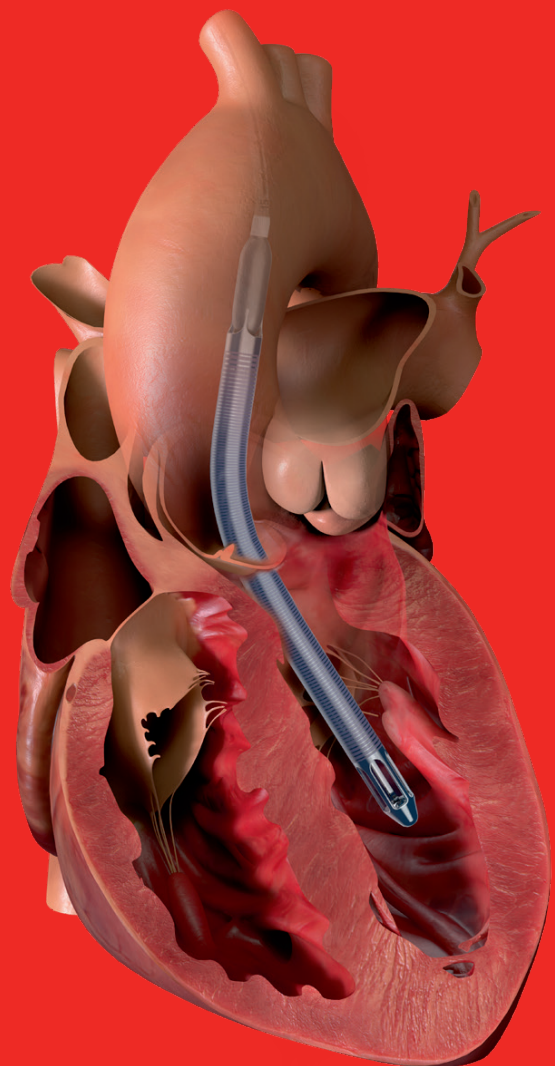
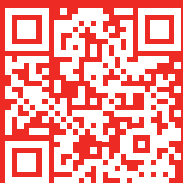
ISMCS 2026 Executive Chair: Po-Lin Hsu (China)

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1. Ott S. et al. 2022. Life. 12:1931. <https://doi.org/10.3390/life12111931>

2. Saito S, et al. 2023. J Cardiol. S0914-5087(23)00270-8. doi: 10.1016/j.jjcc.2023.10.008

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POSTER SESSION

Mini Oral Posters

Posters

Heart Hackathon Posters

Labeling	ID	Title	Firstname	Lastname	University/Organization	City
MINI ORAL PRESENTATIONS						
MO_001	677	Initial Experience With A Novel Large-Animal Model Of Ventricular Volume Overload	Philipp	Aigner	Medical University of Vienna	Vienna
MO_002	707	Evaluation Of Hemolysis And Its Impact On Renal Dysfunction During Impella Cp Support Using Plasma-Free Hemoglobin	Tajji	Inamori	Saiseikai Kumamoto Hospital	Kumamoto
MO_004	570	Impact Of Combined Use Of Va-Ecmo And Impella (Ecpella) On Short-Term Mortality In Patients With Cardiogenic Shock Receiving Va-Ecmo — A Single Center Retrospective Cohort Study Using Propensity Score Matching —	So	Hirata	Saiseikai Kumamoto Hospital	Kumamoto
MO_005	583	Towards Caregiver-Free Home Management Of Lvad Therapy: A Clinical Study Of Off-Based Home Lvad Care Supported By Community Healthcare	Shunsuke	Saito	The University of Osaka	Suita, Osaka
MO_006	577	Prognostication In Cardiogenic Shock: The Role Of Ehm Data And Micro-Axial Flow Pump Analytics	Thomas	Schulhofer	Medical University of Vienna	Vienna
MO_007	662	The Emperor Total Artificial Heart: A Next-Generation, Fully-Implantable Syncardia Total Artificial Heart	Duffy	Elmer	SynCardia Systems, LLC	Tucson
MO_008	640	Rp Flex Utilization For Right Ventricular Support And Cardiogenic Shock: Single Center Experience	Ioana	Dumitru	TGH	Tampa
MO_009	565	Left Ventricular Assist Device Outflow Graft Pulsed Wave Doppler As A Tool To Derive Flow Waveforms	Ricardo	Deveza	St Vincent's Hospital	Sydney
MO_010	674	Modeling Hemodynamic Stability In Lvad Patients: A Machine Learning Framework Combining Clinical And Pump-Derived Data In The Icu	Antonio	Mosca	Politecnico di Torino	Turin
MO_011	715	Perfusion Performance Evaluation Of A Maglev Centrifugal Pediatric VAD In Mock Circulation Loop	Masahiro	Osa	Ibaraki University	Hfachi
MO_012	653	A Novel Compliant Aortic Phantom Fabrication Method For Cardiovascular Device Testing	Connor	Coughlan-Ward	Monash University	Melbourne
MO_013	614	Quantitative Scoping Review Of Mechanical Circulatory Support Devices Virtual Filling: Unmet Needs And Proposed Solutions	Lorenzo	Civilla	Medical University of Vienna	Vienna
MO_014	599	Comparison Of Cfd And 4D Flow Mri Results In A Total Artificial Heart	Minu	Bahrami	University of Bath	Bath
MO_015	587	Drainage Cannula Choice Impacts Risk Of Complications During Va-Ecmo: An In Silico Analysis	Avishka	Wickramarachchi	Queensland University of Technology	Brisbane
MO_016	616	A Miniaturized Rotary Blood Pump Adapted For Fontan Use In An Animal Model	J	Stanfield	University of Utah	Salt Lake City
POSTER PRESENTATIONS						
PP_001	615	Acute Vasodilator Challenge With Inhaled Nitric Oxide Predicts Pulmonary Hemodynamic Reversibility After Left-Ventricular Assist Device Implantation	Kei	Morishita	The University of Tokyo Hospital	Tokyo
PP_002	704	A Novel Application Of Impella Percutaneous Axial-Flow Pump Support: Bridging To Surgery Following Hemodynamic Optimization In A Ruptured Sinus Of Valsalva Aneurysm	Tomoki	Ushijima	Kyushu University	Fukuoka
PP_003	650	Association Of Inhaled Nitric Oxide With Va-Ecmo Weaning And Short-Term Outcomes In Ecpella Patients — A Single Center Retrospective Cohort Study —	Motomaro	Tanaka	Kumamoto University	Kumamoto
PP_004	696	Touch, See, Trust: A Graphical User Interface Framework For Modular Circulatory Support Technology	IFan Yen	Yen		Suzhou
PP_005	684	Outcome Of Implantable Ventricular Assist Device For Children Less Than 40 Kg	Akiko	Yamagata	Tokyo Women's Medical University	Tokyo
PP_006	567	Predictivity Of Each Readiness-To-Explant Criterion For Successful Venoarterial Extracorporeal Membrane Oxygenation Explantation	Keiichiro	Iwasaki	Okayama University Faculty of Medicine, Dentistry and Pharmaceutical Sciences	Okayama
PP_007	633	Integrated Management For Superior Outcomes: Early Experience With Four Chinese Lvads In A New Lvad Program	Zhengdong	Hua	Wuhan Asia Heart Hospital	Wuhan
PP_008	631	Quantitative Evaluation Of Pulmonary Edema Based On Starling's Law In Ex Vivo Lung Perfusion	Daisuke	Sakata	National Institute of Advanced Industrial Science and Technology	Tsukuba
PP_009	657	A Novel Optical Thrombus Imaging System Incorporating Depth Information For The Excor® Pediatric	Ayato	Netsu	Shibaura Institute of Technology	Tokyo
PP_010	745	Development And Evaluation Of An Active Magnetic Bearing For The Bivacor Tah	Nicholas	Greath	Inc	Huntington Beach
PP_011	727	Intra-Aortic Cardiac Support Device Lifeheart For End-Stage Heart Failure	ELIF	Oran	Coventry University	COVENTRY
PP_012	598	Innovative Acoustic Characterization Of Heartmate 3 Lvad For Remote Monitoring: Preliminary Results	Silvia	Cannone	Politecnico di Torino	Turin
PP_013	564	First Applications Of A Novel System For Hypothermic Temperature-Controlled Allograft Preservation In Heart Transplantation	Antonio	Loforte	University of Torino	Turin
PP_014	730	Myocardial Fibrosis Before And After Mechanical Unloading By Ventricular Assist Devices In Adult And Pediatric Patients	Johanna	Schlein	Medical University of Vienna	Vienna
PP_015	728	Non-Invasive Analysis Of Circadian Pattern In Lvad Patients Using Heartmate 3 Pump Data	Iliaria	Mordini	Politecnico di Torino	Turin
PP_016	731	Capillary Density In The Myocardium Before And After Mechanical Unloading By Ventricular Assist Devices In Adult And Pediatric Patients	Johanna	Schlein	Medical University of Vienna	Vienna
PP_017	658	Clinical Significance Of Post-Ecmo Systemic Inflammatory Response Syndrome Following Va-Ecmo Decannulation: A Retrospective Single-Center Study	So	Hirata	Saiseikai Kumamoto Hospital	Kumamoto
PP_018	593	The Predictive Power Of Hemolysis While On Micro-Axial Flow Pump Support For Early Outcomes In The Bridge To Cf-Lvad Therapy	Antonio	Spitaleri	University of Turin	Turin
PP_020	607	ANALYSIS OF SECONDARY FLOW STRUCTURES IN THE HEARTMATE 3 AND THEIR IMPACT ON BLOOD DAMAGE USING PROPER ORTHOGONAL DECOMPOSITION	Vincenz	Crone	Institute of Turbomachinery	Rostock
PP_021	626	Minimally Invasive Virtual Fitting Of VAD Implantation In A Simulated Case	Lorenzo	Civilla	Medical University of Vienna	Vienna
PP_023	659	Impact Of Combined Use Of Va-Ecmo And Impella (Ecpella) On Short-Term Mortality In Patients With Cardiogenic Shock Receiving Va-Ecmo — A Single Center Retrospective Cohort Study Using Propensity Score Matching —	So	Hirata	Saiseikai Kumamoto Hospital	Kumamoto
PP_025	607	A Comprehensive Compliance Model To Simulate Mcs Device Outcomes In A Lumped Parameter Model	Kristóf	Sárosi	ETH Zurich	Zurich
PP_026	740	Validated For Longevity: Two-Year In-Vitro Reliability Outcomes Of The Bivacor Left Ventricular Assist System	Xin	Yang	Briohealth Technology Inc.	Suzhou

Labeling	ID	Title	Firstname	Lastname	University/Organization	City
PP_027	672	Investigating Autonomic Regulation In A Mock Circulatory Loop For Testing Total Artificial Hearts	Noor	Jabban	University of Bath	Bath
PP_028	606	Outcome Impact Of Multiple Mcs Configurations In Patients With Cardiogenic Shock	Ioana Dumitru	Dumitru	TGH	Tampa
PP_029	594	Trade-Off And Evolving Risk Of Ischemic And Bleeding Events Among Patients With A Left Ventricular Assist Device In Contemporary Practice: A Eurotrans Registry Analysis	Guglielmo	Gallone	University of Turin	Turin
PP_030	721	Pump Parameters And Clinical Data In Emella Vs Impella 5.5 Only Therapy: A Comparative Analysis	Lukas	Ruoff	Medical University of Vienna	Vienna
PP_032	645	AI-Based Estimation Of Cardiac Function From Maglev Vad Control Signals: A Sensorless Approach	Yui	Tanaka	Institute of Science Tokyo	Tokyo
PP_033	595	Wireless Transcutaneous Energy Transfer System For TAH/LVAD Systems Cutaneously Integrated In A Porcine Model	Bengt	Bern	Sahlgrenska	Göteborg
PP_034	678	A Successful Staged, Multi-Device Pathway To Heartmate Iii LVAD Implantation As Bridge To Candidacy	Giulia	Pisani	ASST Grande Ospedale Metropolitano Niguarda	Milan
PP_035	585	ISmcs 2025 Annual Meeting – Abstract Template: Here Goes Your Title	Shweta	Karnik	Georgia Institute of Technology & Emory University	Atlanta, GA
PP_038	635	Patient-Specific Soft Robotic Aorta Phantom Embedded In A Closed Loop Cardiovascular Simulator For Va-Ecmo Investigation	Loes	Van Leeuwen	University of Twente	Enschede
PP_040	604	Quality Of Life For Patients Using Ventricular Assist Devices: A Multimodality Study	Ibrahim	Ayoub	Dr in critical care nursing	Beirut
PP_043	752	Experience With Revascularization And Mechanical Circulatory Support In Stemi Patients Under Extreme Conditions	Serhi	Shpak	Amosov institute	Kyiv
PP_044	751	Non-Invasive Blood Pressure Measurement In A Corwave LVAD Patient	Desiree	Robson	St Vincents Hospital	Sidney
PP_045	749	The Importance Of Multidisciplinary Collaboration In The Long-Term Management Of Extracorporeal Mechanical Circulatory Support Leading To Heart Transplantation	Hironichi Sonoda	Sonoda	Kyushu University Hospital	Fukuoka
PP_046	747	Development Of Aggressive Treatment Methods Involving Direct Administration Into The Trachea Of Patients Filled With Ecmo, And Development Of Animal Experimental Model	Yusuke	Inoue	Asahikawa Medical University	Asahikawa
PP_047	734	Cardiac Remodeling And Patient Recovery After Pediatric And Adult LVAD Implanting Open Heart Surgery	Sudhir	Rajphandari	Zhengzhou University	Zhengzhou
PP_048	692	Hemodynamic Optimization Of Rotary Blood Pumps Through Adjoint Solver	Tharusha	Perera	University of Auckland	Auckland
PP_049	736	The Australian Experience From A Decade Of Dcd Heart Transplantation	Claudio	Soto	St Vincent's Hospital	Sydney
HEART HACKATHON						
HH_001	638	In-Body Wireless Data Transfer Antenna For A Total Artificial Heart	Dylan	Shobanjo	University of Bath	Bath
HH_002	641	Uv-Vis Spectrophotometric Analysis Of Leachates From Materials Used In A Total Artificial Heart	Morgan	Reed	University of Bath	Bath
HH_003	664	Assessment Of Different Manufacturing Methods For Artificial Ventricles In A Total Artificial Heart	Lisa	Lammali	University of Bath	Bath
HH_004	673	Computational Fluid Dynamics: Effects Of Channel Impeller Width Of The Double Bladeless Total Artificial Heart (Dbl-Tah)	Nathakit	Kiatinongkol	Mahidol University	Bangkok
HH_005	676	Design And Development Of A Flat Spiral Coil Wireless Power Transfer For A Total Artificial Heart (Tah)	Carys	MacIntyre	University of Bath	Bath
HH_006	693	Next-Generation Total Artificial Heart: Magnetically Levitated Barbell Impeller For Wear-Free, High-Performance Circulatory Support	Bramwell	Clarkson	University of Canterbury	Christchurch
HH_007	699	Investigating Valve And Sinus Geometry In Polymeric Valves For A Total Artificial Heart	Joshua	Keenan	University of Bath	Bath
HH_008	737	Design And Evaluation Of An Emerging Lightweight, Core-Less Motor Topology And Its Application In A Non-Centrifugal Device	Luke	Hehir	Monash University	Melbourne
HH_009	755	BioVad Magnetically Levitated Blood Pump Tilting Resistance Research	Chen	Chen	BrioHealth Solutions, Inc.	Boston
HH_010	756	In-Silico Verification Of Anatomical Filament For A Total Artificial Heart Using V Patients Software	Benjamin	Iliev	California Baptist University	Riverside
HH_011	757	ISmcs 2025 Annual Meeting – Assessing Hemolysis In A Pulsatile Heart Pump Loop	Kate	Nehrbass	California Baptist University	Riverside, CA
HH_012	758	Uc Biomed Tah: Experimental Insights And Computational Analysis	Bramwell	Clarkson	University of Canterbury	Christchurch
HH_013	760	Long-Term Survival And Quality Of Life In LVAD Patients: A Systematic Review Of Continuous-Flow Versus Pulsatile-Flow Devices	Imaan	Suriya	Monash University	Melbourne
HH_014	766	Surface Modification Of Titanium Alloy By Anodisation To Improve Hemocompatibility	Mariam	Reza	UNSW	Sydney
HH_015	767	Ktah Total Artificial Heart	Sofia	García Avila	KTH Royal Institute of Technology	Stockholm
HH_016	770	Evaluation And Selection Of A Pumping Mechanism For A Total Artificial Heart	Aryka	Gordon	University of Alberta	Edmonton
HH_017	772	Management Of Gastrointestinal Bleeding For Patients With Continuous Flow Left Ventricular Assistive Devices: A Systematic Review Of Pharmaceutical Treatment Strategies	Brian	Ochipinti	Monash University	Clayton
HH_018	774	Heart Hackathon Heartlab Vienna	Leon Ballabani	Ballabani	University of Applied Science Technikum Vienna	Vienna

Thank you
for your participation!

