AUSTRALIAN MCS SYMPOSIUM 2026

ausmcs.org

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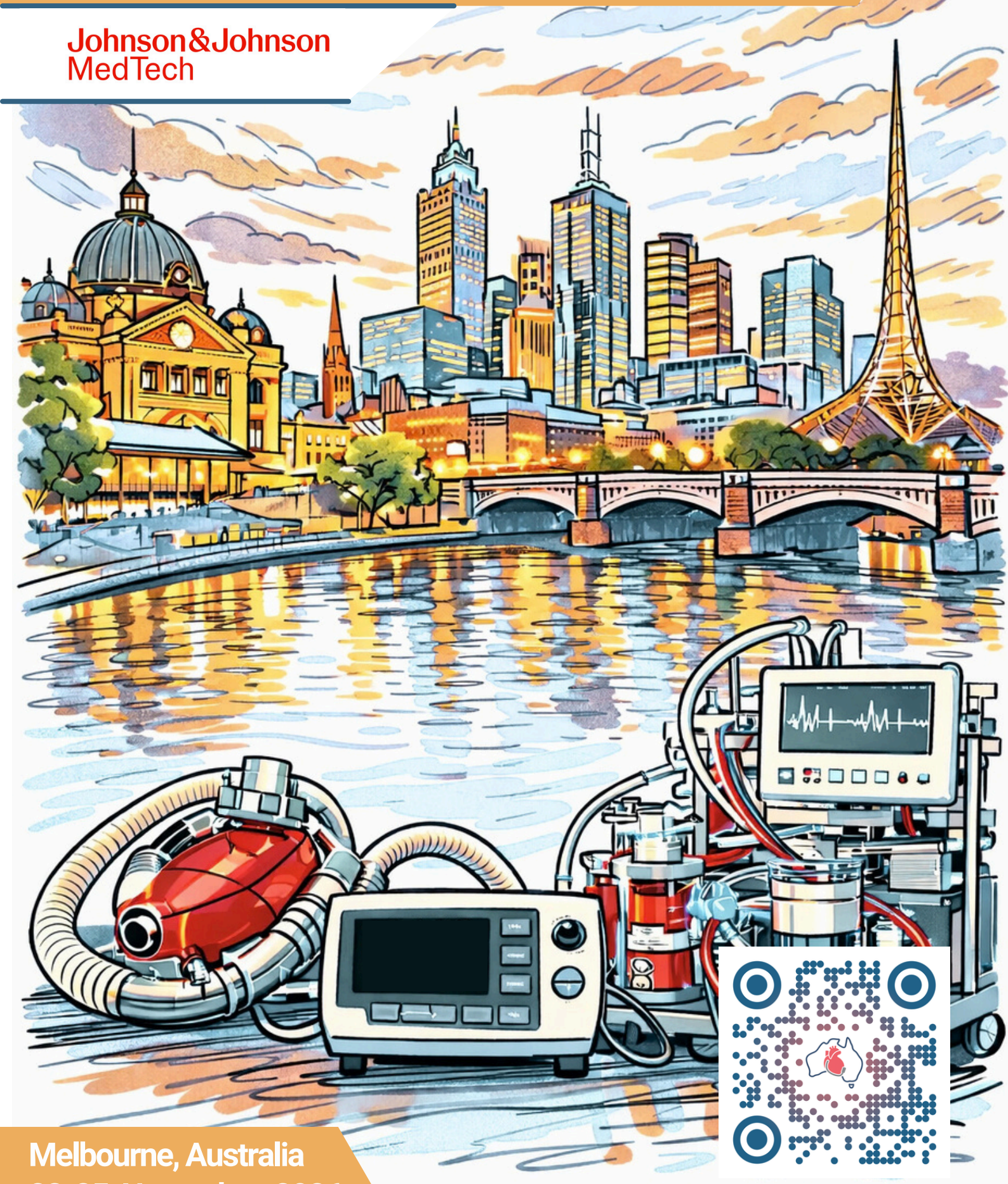
Johnson&Johnson MedTech



Melbourne, Australia

23-25, November, 2026

Australian Mechanical Circulatory Support Symposium

REGISTRATIONS OPEN NOW!

DETAILED PROGRAM

Monday 23rd of November

12:20 **Session 1E: Early Career Researchers' Day**

12:20 Welcome Address - **Michael Huang** - Victorian Cardiovascular Research Network

12:25 **Keynote - From Bench to Breakthrough: Lessons from Building a Research Career - Francine Marques**

13:00 - Session 2E: ECR Talk Prize Session - Judged by Industry

13:00 Implementing ECMO Services - Nursing Expertise & Workforce Dynamics - **Paul Ross**

13:07 Natural Language Processing for Detecting Bleeding in ECMO - **Emma Vande Wouwer**

13:14 Echocardiogram-Guided Speed Optimisation Improves Haemodynamic Outcomes in Patients With VADs: A Single Centre Retrospective Study - **Mariana Dragas**

13:21 How Artificial Lung Cannulation Configuration Influences Group 3 Pulmonary Hypertension - **Michael Garbutt**

13:28 Haemocompatibility by Design: Engineering Trust at the Blood-Material Interface - **Sophie Armstrong**

13:35 Kinetics and Outcomes of Early Thrombocytopenia in VA-ECMO: Insights from OBLEX - **Ruan Vlock**

13:42 Where and When Healthy Aortic Flow Transitions: Geometric Sensitivity and Turbulence Model Performance - **Zahra Dastyar**

13:49 A Tuneable Soft Robotic Model of Aortic Stenosis - **Patrick Pruscino**

13:56 Preclinical Validation of a Custom Multi-Wavelength NIRS Cerebral Oximeter During CPR: A Porcine Cardiac Arrest Model - **Joshua Lute**

14:03 Monash Artificial Heart Team Update - **Monash Heart Hack**

14:10 QUT Artificial Heart Team Update - **QUT HeartBeats**

14:17 UNSW Bionic Heart: Award-Winning Student-Led Artificial Heart Team - **UNSW Bionic Heart**

14:30 **Afternoon Tea - Sponsored by CorWave**

15:30 **Session 3E: Workshop - Clinician-Engineer Matchmaking** - Hosted by **Andrew Stephens**

18:00 - Late **ECR Dinner and Drinks - Sponsored by Johnson and Johnson Cardiovascular**

Dinner at Conference Venue Freddy's Pizza

Drinks at College Lawn Hotel, 36 Greville St, Prahran VIC 3181

DETAILED PROGRAM

Tuesday 24th of November

9:00 **Session 1: Welcome Address and Keynotes**

9:00 Welcome Address - **Hitesh Patel and Jayne Sheldrake**

9:10 Patient Experience on ECPELLA, A Post-Stemi MCS Journey - **Shaun and Jayne**

9:40 **International Keynote -** The Critical Care Envelope: A New Safety Framework for ECMO Delivery - **Christiaan Meuwese**

10:10 **Keynote** - Confinement and Clotting, the Challenges of Paediatric VAD - **Jacob Mathew**

10:30 **Morning Tea - Sponsored by Roche**

10:50 **Session 2: Industry Talks**

10:50 **Johnson and Johnson -** TBC - **Kristofer Dickson**

11:00 **Hydrix -** A Platform Approach to Mechanical Circulatory Support Innovation - **Pauline Newlove**

11:10 **Abbott -** The Challenges of Miniaturizing the LVAD Pump and Peripherals - **Abbott Global R&D Team**

11:20 **Elite Medical -** Who is Elite Medical? And Why Are We at AUSMCS? - **Nelson May**

11:30 **Session 3: Invited Talks**

11:30 Artificial Heart Frontiers Program Update - **Shaun Gregory**

11:42 Alfred Intensive Care Research Update - **Aidan Burrell**

11:52 Simulating ECPR In Vivo for Applications in Research and Training - **Daniel Donner**

12:06 Right Ventricular Failure After LVAD Implantation Following Bridging With V-A ECMO - **Hideaki Nonaka**

12:18 Soft Robotics Towards Advanced In-Vitro Cardiovascular Modelling - **James Davies**

12:30 **Lunch and Team Photo - Sponsored by Johnson and Johnson**

13:30 **Session 4: Invited Talks**

13:30 Man Vs Machine: A New Way of Validating Medical AI - **Andrew Stephens**

13:42 Cardioprotective Therapies During VA ECMO Support - **Christiaan Meuwese**

13:54 Novel Trainers for ECMO Initiation - **Madeline Rhodes**

14:06 Neural Posterior Estimation for Patient-Specific Digital Twins - **Prashant Chand**

14:18 Australian Mechanical Circulatory Support Registry Update - **Chris Hayward**

14:30 Modelling Gas Exchange on VV ECMO - **Chris Joyce**

14:42 Paediatric VADs in an Adult Arena: Innovation, Adaptation and the SCHN Experience - **Ania Berent**

DETAILED PROGRAM

Tuesday 24th of November - Continued

15:00 **Afternoon Tea - Sponsored by Roche**

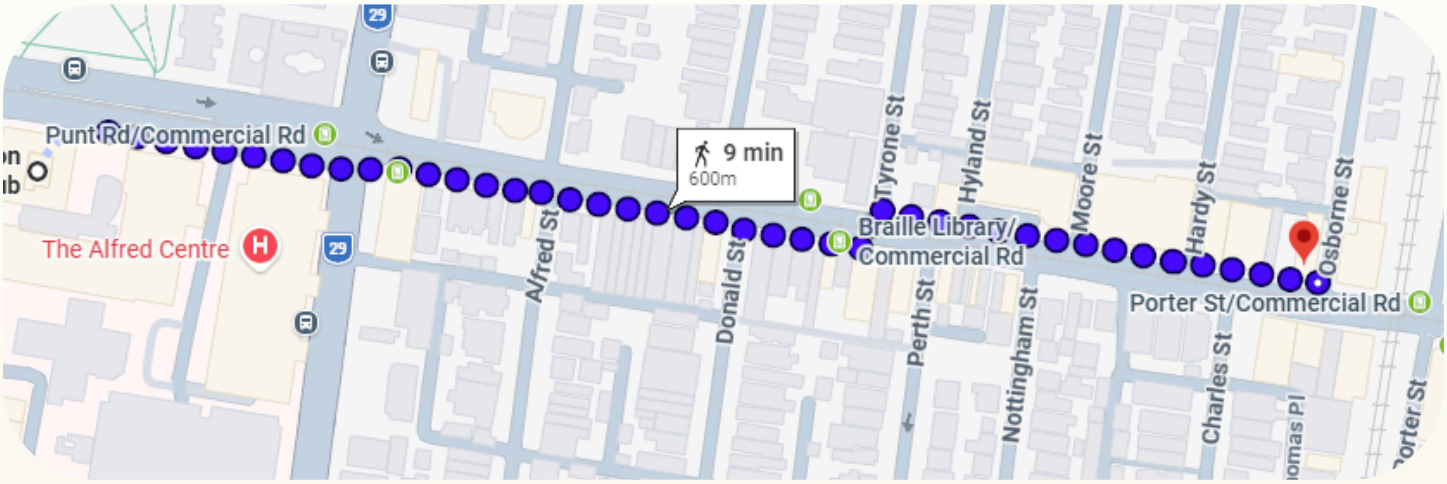
15:30 **Session 5: Workshop - Reverse Brainstorming: Tackling MCS's Biggest Problems**

- Hosted by **Daniel Donner** and **Nchafatso Obonyo**

17:30 **Alfred ICU Tour and Baker Institute Labs Tour**

18:30 - Late **Gala Dinner at the Osbourne**

- 119 Commercial Rd, South Yarra, 3141



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AUSMCS AUSTRALIAN MECHANICAL CIRCULATORY SUPPORT SYMPOSIUM

DETAILED PROGRAM

Wednesday 25th of November

9:30 **Session 6: Patient Experience and Keynotes**

9:30 **Patient Journey -** Takeaway ECPR: Out-of-Hospital Cannulation in a Coffee Shop **- Brendan and Rosie**

10:00 **10:00 -** Keynote - Mechanical Circulatory Support in Congenital Disease - **David Kaye**

10:30 **Keynote** - The role of Impella 5.5 In Cardiogenic Shock - **Dion Stub**

11:00 **Morning Tea - Sponsored by Elite Medical**

11:30 **Session 7: Invited Talks**

11:30 A Novel Pulsative VAD - **Ulrich Stock**

11:42 Up, Down, and Back Again: Rethinking VA-ECMO Haemodynamics **- Pankaj Jain**

11:54 The Turbulent Relationship Between Blood and MCS **- David Bark**

12:06 RV Failure after LVAD: Surgical Perspective - **Silvana Marasco**

12:18 Accelerating ECPR Research: Translational Insights from Experimental Models **- Candice Todd**

12:30 **Lunch - Sponsored by Abbott Laboratories**

13:30 **Session 8 - Panel: ECMO Saves Lives, So Why Can't We Prove It?**

Moderated by **Pankaj Jain; Arne Diehl** - Intensive Care Consultant, **Jayne Sheldrake** - ECMO Coordinator; **Mark Sackley** - Patient Advocate, **Lisa Higgins** - Health Economist

14:30 **Afternoon Tea - Sponsored by Elite Medical**

15:00 **Session 9 - Invited Presentations**

15:00 The Role and Evidence of Intermediate Cardiac Support - Is There a Place? - **Arne Diehl**

15:12 Preclinical Device Testing in Large Animal Models - **Nchafatso Obonyo**

15:24 Left Ventricular Unloading During VA-ECMO **- Quentin Moyon**

15:36 Improving LVAD Tissue Integration Through Additive Manufacturing: Early In Vitro and In Vivo Evidence **- Linxiao Zeng**

16:00 **Closing Ceremony and Awards - Presented by Sponsors**

PROGRAM AT A GLANCE

Monday 23rd of November - ECR Day

ECR Keynote: From Bench to Breakthrough: Lessons from Building a Research Career - Francine Marques
Invited EMCR Talks: *Prizes to be Won!*
EMCR Workshop: *Clinician - Engineer Matchmaking*
Young Investigator Dinner: *Pizza and Beers at the College Lawn*

Tuesday 24th of November

Patient Story: ECPELLA - A Post-STEMI MCS Journey
International Keynote: The Critical Care Envelope: A New Safety Framework for ECMO - Christiaan Meuwese
Keynote: *Confinement and Clotting, the Challenges of Paediatric VAD - Jacob Mathew*
Workshop: *Reverse Brainstorming - Solving MCS's Biggest Problems*
Gala Dinner: *The Osbourne Rooftop Bar*

Wednesday 25th of November

Patient Story: *Coffee To Go: An ECPR Journey*
Keynote: David Kaye - *MCS in Congenital Patients*
Keynote: Dion Stub - *The Role of Impella 5.5 in Cardiogenic Shock*
Panel: *ECMO Saves Lives. So Why Can't We Prove It?*
ECR Awards Ceremony

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