

Report on RAPCON 2025 – Conference

Ramachandra Advanced Perfusion Conference (RAPCON - 2025)

Date: 28 & 29 November 2025

Venue: Sri Ramachandra Institute of Higher Education and Research (SRIHER)

RAPCON 2025 brought together leading perfusionists, clinicians, educators, and researchers across India for a two-day academic conference focused on advancements in cardiac perfusion science. The event included expert lectures, workshops, hands-on sessions, panel discussions, and interactive learning tools, including virtual reality modules for complex cardiac anatomy. The conference served as a platform for knowledge exchange, innovation, and skill development for practicing perfusionists, students, and healthcare professionals involved in cardiac care.

Our students have witnessed different Scientific Sessions on the following topics:

“Beyond the Routine: Cardiopulmonary Bypass in Special Scenarios” which explained the detailing in advanced perfusion strategies in high-risk and non-routine cardiac surgical situations. The talk focused on customized bypass management for special case categories.

“Beyond the Beat: The Art and Science of LVAD Support” which focused on the physiological principles, device management, and troubleshooting of Left Ventricular Assist Devices with real-time clinical examples.

“Cannulation Techniques – A Perfusionist’s Perspective”, a detailed exploration of cannulation strategies, anatomical considerations, and complication prevention.

“MERIL – Commitment to Excellence in Cardiac Innovation” had an insight into emerging technologies and innovations in cardiac devices, with emphasis on industry-clinical collaboration.

A Quiz & Workshop was conducted on the title: “Bringing the Heart to Life: Virtual Reality as a Tool for Advanced Cardiac Anatomy Education” in which the students were engaged in immersive VR-based learning, understanding complex cardiac structures, perfusion routes, and surgical correlations through interactive modules.

“Current Practice in Perfusion Strategies in Aortic Arch Surgery” about a deep dive into temperature management, cerebral protection, and perfusion protocols during complex arch procedures.

“Endotoxin and Cytokine Adsorption in Cardiac Patients: Clinical Applications and Insights” Was shared online, the lecture explored hemoadsorption technologies for inflammatory modulation during cardiac procedures.

“Manual EX–Vivo Lung Perfusion – India’s First Experience” was presented India’s early experience with ex-vivo lung perfusion, highlighting logistics and future potential.

“Evolution of Cardiopulmonary Bypass” on a historical and technological overview of CPB advancement, including modern circuit innovations and safety upgrades.

“Challenges for a Perfusionist in Minimal Invasive Cardiac Surgery” covered perfusion management in MIS approaches, limited access issues, and risk mitigation.

Workshop Sessions

- 1) Hands-on training and interactive modules
- 2) Advanced skill-building exercises

focused on Perfusion circuit troubleshooting, ECMO management, Simulation-based crisis response, and Innovations in cardiac support technology.

The event served as an inspiring platform for collaboration, knowledge sharing, and the advancement of perfusion science in India for the students.

