



# Reimagining Cardiac Rehabilitation and Prevention: Thinking Outside the Box

3 & 4 | Orchard Hotel  
October 2025 | Singapore



## PROGRAMME

Day 1 | 3 Oct 2025, Friday

**08:00AM – 09:00AM On-Site Registration | Exhibition and E-Poster Viewing**

**08:30/09:00AM – 10:30AM Pre-Symposium Workshops**

**09:00AM Workshop 1: From East to Heart: Evidence-Based Traditional Chinese Medicine Remedies for Modern Cardiac Care**

Physician Nick Tan (Come Here TCM Clinic)

*Can ancient wisdom and modern science be combined to heal the heart? This interactive workshop explores evidence-backed traditional Chinese medicine (TCM) remedies – from food/herb formulations to physical therapies – that complement conventional cardiac care.*

*Discover how TCM's holistic principles align with contemporary cardiology, learn to debunk TCM myths, and discuss the practical strategies to integrate these approaches safely into patient care.*

**08:30AM Workshop 2: Broadening Horizons: Engaging Exercise Options in the Cardiac Rehabilitation Journey**

Mr Haja Mydin Yah Kathier (National Heart Centre Singapore), Ms Samantha Ng (National Heart Centre Singapore), Mr Michael Khoo (National Heart Centre Singapore), Ms Nadiah Binte Mohamed Rahim (National Heart Centre Singapore)

*This presentation will discuss the integration of functional training and high-intensity interval training (HIIT) in cardiac rehabilitation. Functional training focuses on movements that enhance strength, balance, and independence in daily life, while HIIT provides an efficient approach to improving aerobic capacity and cardiovascular health when applied safely. Practical examples of functional exercises will be outlined, with guidance on progressing from low-intensity to more advanced formats.*

*Speakers will also share their exergaming journey, from trying out different platforms and assembling exergaming rig, to patient selection to ensuring patient safety.*

**09:00AM Workshop 3: Cardiopulmonary Exercise Testing Workshop**

Prof Kathy Sietsema (Emeritus Professor of Medicine, Harbor-UCLA Medical Center; UCLA School of Medicine), Dr Laureen Wang (National University Heart Centre, Singapore @ Alexandra Hospital), Dr Violet Hoon (Tan Tock Seng Hospital), Mr Keith Chua (Tan Tock Seng Hospital)

*Get practical tips on setting up a cardiopulmonary exercise testing (CPET) lab. Get hand-on experience on interpreting common clinical cases. Learn more about technical and quality control issues and how to manage them.*

**09:00AM Workshop 4: Cardiac Prehabilitation Workshop**

Dr Geetha Kayambu (National University Hospital), Ms Li Xin Ong (National University Hospital), Ms Tricia Teo (National University Hospital), Ms Kit Cheng Ting (National University Hospital), Ms Yao Li (National University Hospital)

*Cardiac prehabilitation has been shown to reduce the risks of death and rehospitalisation for patients with coronary artery disease. This workshop engages participants in a virtual patient's journey through the mental and physical preparation for a cardiac surgery, from prehabilitation to rehabilitation. Encounter each member of the cardiac prehabilitation team and learn their crucial roles. Learn the art of pre-exercise prescription, cognitive and pain management, and much more through a step-by-step approach to curating a cardiac prehabilitation program designed for all health professionals.*

**10:30AM – 11:00AM Coffee/Tea Break | Exhibition and E-Poster Viewing**



Singapore Prevention & Cardiac  
Rehabilitation Symposium 2025

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### 11:00AM – 11:20AM Opening Ceremony

#### Opening Speech by Organising Chair

Dr Violet Hoon, SPCRS 2025 Chairperson, Organising Committee

#### Speech by Guest of Honour

Dr Koh Poh Koon, Senior Minister of State for the Ministry of Health and Ministry of Manpower

#### Opening Performance

Singapore Heart Foundation (SHF)'s Healthy Heart Support Group

### 11:20AM – 12:35PM Keynote Address 1 – Strategies for Metabolic Health and Healthy Ageing

#### Case Study of Obesity and Cardiovascular Disease in Asians and Asian Americans: Strategies for Assessment and Intervention

Prof Wen-Chih Wu (Medical Director, Brown University Health Cardiovascular Wellness and Prevention Center; AACVPR Immediate Past President)

*This presentation discusses how the definition of obesity applies to Asian-Americans and what are its implications in clinical management.*

#### The Role of Diet and Exercise in Managing Obesity

Dr Jean-Paul Kovalik (Duke-NUS)

*Obesity is a global health burden that drives many disease pathologies. We now have effective pharmacologic and surgical approaches to treat obesity. However, given the scale of the problem and costs involved, lifestyle modification will remain the foundational approach for most patients. This talk will discuss the important roles and limitations of these interventions for treating obesity.*

#### Cardiovascular Ageing

A/Prof Angela Koh (National Heart Centre Singapore)

*Cardiovascular ageing contributes to cardiovascular disease in older adults. This talk discusses how ageing affects cardiovascular disease pathogenesis in older persons, with an emphasis on examining possible strategies to prevent, retard or reduce cardiovascular disease burdens on our ageing population.*

#### Pharmacological Therapies in Lipid Lowering in Primary Prevention

Dr Jian Jing Tan (The Cardio Clinic)

#### Panel Discussion/Q&A Session

Chairpersons: Asst Prof Tee Joo Yeo (National University Heart Centre, Singapore) and Dr Matthew Boon Wah Liew (Asian Heart & Vascular Centre)

### 12:35PM – 01:50PM Lunch

Organised by:



Conference Secretariat:





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## Day 1 | 3 Oct 2025, Friday

### 01:50PM – 03:05PM **Keynote Address 2 – Exercise Prescription and Cardiopulmonary Exercise Testing**

#### **Cardiopulmonary Exercise Testing: Applications in Cardiology**

Prof Kathy Sietsema (Emeritus Professor of Medicine, Harbor-UCLA Medical Center; UCLA School of Medicine)

*Cardiopulmonary exercise testing (CPET) measures blood pressure, heart rate, electrocardiogram, breathing and gas exchange during graded exercise. A key parameter is oxygen uptake ( $VO_2$ ), which reflects metabolic demand and defines maximal exercise capacity. Peak  $VO_2$  is a global indicator of health, fitness and survival across populations, including those with heart failure, congenital heart or lung disease, and surgical risk. CPET supports diagnosis of unexplained symptoms, personalised assessment of known conditions, and rehabilitation planning. Its ability to profile impairment, identify limiting factors, and guide tailored interventions makes CPET valuable in both clinical decision-making and patient care.*

#### **Consumer Atrial Fibrillation Screening: Evidence and Challenge**

Dr Ngai-Yin Chan (Deputy Hospital Chief Executive, Princess Margaret Hospital)

#### **Cardiac Rehab in Heart Failure**

Dr Abdul Halim Raynaldo (Chairman, Cardiovascular Prevention and Rehabilitation Working Group, Indonesian Heart Association)

*Heart failure (HF) prevalence and burden have risen globally, including in Indonesia, where HF contributes significantly to disability. Yet cardiac rehabilitation (CR), a Class IA guideline-recommended multidisciplinary intervention, remains underused worldwide.*

*CR integrates exercise training, risk factor management, and psychosocial support, improving capacity and quality of life, as well as reducing hospitalisations and mortality. Exercise prescription is guided by baseline CPET or 6-minute walk test and tailored via the functional intensive interval training principle. While centre-based CR is traditional, access is expanding through home-based, hybrid and virtual models that leverage technology for monitoring and delivery, offering scalable patient-centred solutions to enhance outcomes in HF care.*

#### **Artificial Intelligence in Action: CVS.AI's Approach to Addressing Heart Disease**

Dr Lohendran Baskaran (National Heart Centre Singapore)

*Cardiovascular disease (CVD) remains a leading cause of death and morbidity in Singapore, driven by an ageing population and lifestyle-related risk factors. Early and accurate diagnosis is essential to improving outcomes, and cardiac imaging plays a critical role.*

*CVS.AI recognises the growing burden of CVD and its impact on public health. It harnesses the power of artificial intelligence to enhance cardiac imaging and support timely, data-driven clinical decisions. By integrating AI with imaging technologies, diagnostic accuracy, efficiency, and patient care are improved.*

*This talk elaborates on CVS.AI's ongoing projects and innovations towards transforming cardiovascular care in Singapore and globally.*

#### **Panel Discussion/Q&A Session**

Chairpersons: Prof Swee Yaw Tan (National Heart Centre Singapore) and Dr Luo-Kai Wang (National Heart Centre Singapore)

### 03:05PM – 03:35PM **Coffee/Tea Break**





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## Day 1 | 3 Oct 2025, Friday

03:35PM – 05:05PM Parallel Tracks

### Track A

#### Supporting Heart Health with Music Therapy: A Holistic Approach to Cardiology

Ms Stephanie Chan (Singapore General Hospital)

*Music gives patients a safe space to express themselves, process their experience, and find motivation, especially when words are hard to come by. This session introduces how music can play a valuable role in cardiac care and rehabilitation. Learn evidence-based techniques that can help cardiac patients work toward functional gains and stay engaged in their recovery. This session also presents real-case examples on post-cardiac event patients with low mood, anxiety or emotional overwhelm, who were helped by music therapy to reconnect with their sense of self in an acute hospital setting.*

#### Diet for Heart Longevity

A/Prof Verena Tan (Singapore Institute of Technology)

#### Benefits of Hydrotherapy in Cardiac Rehabilitation

Ms Shi Jia Loke (Changi General Hospital)

#### Moving with Purpose: Transition from Physical Activity to Structured Exercise

Ms Valerie Tan (Transcend Physiotherapy)

*This presentation highlights the essential shift from general physical activity to structured exercise in cardiac rehabilitation. It explores the clinical benefits of targeted exercise, common barriers to this transition, and practical strategies – such as education, assessment-driven prescriptions, progressive exposure and behavioural support – to help clinicians guide patients effectively.*

*Participants will gain valuable insights to enhance rehabilitation outcomes by integrating structured exercise as a core component of cardiac care.*

#### Beyond the Hospital Walls: Building the Compassionate Connection in Fostering “Caring Begins with Me” (A Patient’s Perspective and Passion in Patient Care and the Impact of Healing)

Ms Magdalene Chia (Caring Hearts Support Group, National University Heart Centre, Singapore)

*The post-discharge journey of cardiac patients is often marked by isolation. In this presentation, the speaker draws from her lived experience as a coronary artery disease survivor and as the lead of the Caring Hearts Support Group, sharing insights on recovery, peer support, and health coaching. This session advocates community-based strategies that bridge clinical care and lived experience, and offers a roadmap for professionals and policymakers to reimagine rehabilitation as a holistic, compassionate, community-driven journey that enhances healing and long-term well-being.*

#### Panel Discussion/Q&A Session

Chairperson: Dr Jeremy Chai (National Heart Centre Singapore)



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### Track B

#### Impact of Heat Stress on Human Brain Physiology and the Implications for Mental Health

Dr Xiang Ren Tan (National University of Singapore)

*The brain is particularly susceptible to heat stress. Research demonstrates that both the structure and function of the human brain can be compromised by exposure to elevated temperatures, associated with declines in physical performance, cognitive ability, and mental well-being – even a 1°C rise in ambient temperature has been linked to a greater likelihood of depression and anxiety.*

*This presentation reviews current evidence on the effects of heat stress on brain function, discusses proposed mechanisms of impairment, addresses the implications for mental health, and outlines potential strategies for enhancing heat resilience in a warming world.*

#### Are Marathons and High-Intensity Interval Training Suitable for Heart Patients or Even Regular People?

Asst Prof Tee Joo Yeo (National University Heart Centre, Singapore)

*The benefits of exercise are well known, but is exercise still possible after a heart attack or in someone living with heart disease?*

*More and more people are participating in sporting activities such as marathons and high-intensity interval training. Find out if these are suitable for heart patients and hear about the benefits and risks, as well as the importance of preparticipation screening.*

#### Another Perspective: Traditional Chinese Medicine for Heart Health – Heart Attack and Stroke Treatment

Physician Nick Tan (Come Here TCM Clinic)

#### Health Coaching for Sustainable Lifestyle Change in Heart Health

Ms Susan Tan (Society of Behavioural Health Singapore)

*Sustainable lifestyle change is critical in prevention and rehabilitation, but many individuals struggle with long-term adherence. Health coaching draws from behavioural science to build motivation, health literacy and self-efficacy while navigating barriers to change.*

*This session highlights how health coaching complements clinical care, especially in multidisciplinary teams managing cardiovascular risk. Through case examples and practical insights, we will explore how coaching supports lifestyle change in physical activity, nutrition, smoking cessation, and stress management. Participants will gain a clear understanding of what health coaching is – and is not – and how it bridges the gap between intention and action in cardiac care.*

#### Panel Discussion/Q&A Session

Chairpersons: Asst Prof Siang Chew Chai (Changi General Hospital) and Mr Qamaruzaman Syed Gani (National University Hospital)

05:05PM

End of Day 1 Symposium



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## Day 2 | 4 Oct 2025, Saturday

**08:15AM – 08:45AM** On-Site Registration | Exhibition and E-Poster Viewing

**08:30AM – 09:15AM** Oral Presentation and Judging

**09:00AM – 10:15AM** Keynote Address 3 – Psychosocial, Habit, Cognitive Behaviour and Social Media

### Effectiveness of Cardiac Rehabilitation Programmes Versus Standard Care on Medication Adherence

Prof Robyn A. Clark (Matthew Flinders Distinguished Emeritus Professor, College of Nursing and Health Sciences, Flinders University)

*Cardiac rehabilitation programs provide structured education and support that significantly enhance patients' understanding of their medications and their importance in managing their condition. This, in turn, leads to better adherence to prescribed medication regimens.*

### From Heartbreak to Heartwise: The Psychophysio Collective

Dr Su-Yin Yang (Woodlands Health)

### Mental Health and Cognitive Challenges in Cardiovascular Care

Asst Prof Su Ren Wong (National University Hospital)

*While cardiovascular interventions are often lifesaving and critical in nature, associated mental health and cognitive challenges may be overlooked. As such, patients' quality of life may be affected. This presentation highlights the mental health and cognitive challenges associated with cardiovascular conditions and explores the possible interventions that could be considered for holistic care.*

### If Time Were a Currency, How Would You Spend It? Exploring Differences in People with Chronic Disease and Those Without

A/Prof Emily Ortega (Singapore University of Social Sciences)

*This presentation shares insights from a longitudinal study on time use and well-being in Singaporeans with and without chronic diseases, spanning the COVID-19 transition to the new normal. The study examined quality of life and heart rate variability (HRV), alongside sleep, eating, and exercise patterns. Findings show people with chronic conditions had lower HRV and quality of life, slept less, and spent more time on meals. Those without chronic conditions slept longer on weekends and exercised more, though their activity declined after transition, while people with chronic conditions slightly increased exercise during this period.*

### Panel Discussion/Q&A Session

Chairpersons: Dr Violet Hoon (Tan Tock Seng Hospital) and Dr Paul Lim (The Heart Specialist Clinic)

**10:15AM – 10:45AM** Coffee/Tea Break | Exhibition and E-Poster Viewing



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## Day 2 | 4 Oct 2025, Saturday

10:45AM – 12:00NN

### Keynote Address 4 – Digital and Artificial Intelligence: The Future of Prevention (Integrating Digital and Artificial Intelligence in Cardiac Rehab)

#### A New Era in Cardiac Rehabilitation Delivery: Gaps and Strategies

Prof Wen-Chih Wu (Medical Director, Brown University Health Cardiovascular Wellness and Prevention Center; AACVPR Immediate Past President)

*This presentation discusses different methods of cardiac rehabilitation delivery, practice and management implications to meet the cardiovascular needs of the 21st century.*

#### Increasing ACCESS to Heart Care for the Most Underserved Populations

Prof Robyn A. Clark (Matthew Flinders Distinguished Emeritus Professor, College of Nursing and Health Sciences, Flinders University)

*To improve access to heart care for underserved populations, strategies should focus on addressing social determinants of health, leveraging technology, and implementing targeted interventions. These approaches can help overcome barriers like poverty, lack of insurance, and geographic limitations, ultimately reducing health disparities.*

#### Wearables for Heart Rate and Electrocardiogram Monitoring During Exercise and at Rest: The Ultimate Comparison

Dr Colin Yeo (Changi General Hospital)

#### Can We Use the Digital World to Tackle Insulin Resistance?

Prof Roger Foo (NUS School of Medicine and National University Heart Centre, Singapore)

*Project RESET is a National Medical Research Council-funded cohort study for which we are recruiting Singaporeans who are apparently well, to characterise their underlying (subclinical) disease profiles. Emerging data insights point to a very high abundance of insulin resistance in this group, who are non-diabetic.*

*We are working through digital and smartphone means to engage with our cohort and encourage meaningful behavioural changes aimed at improving insulin resistance and, therefore, positive long-term cardiovascular outcomes.*

#### Acute Myocardial Infarction – Allied Health-Oriented, Patient-Centred, and Digitally Enabled Care (AMI-HOPE)

A/Prof Mark Chan Yan Yee (NUS School of Medicine and National University Heart Centre, Singapore)

#### Panel Discussion/Q&A Session

Chairpersons: Prof Wenru Wang (National University of Singapore) and Prof Huay Cheem Tan (National University Heart Centre, Singapore)



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## Day 2 | 4 Oct 2025, Saturday

**12:00NN – 01:00PM**      **Debate**

## Weight Loss: The Epic Showdown

Moderator: Dr Pinakin V. Parekh (Trident Heart Centre)

### Team 1: Diet and Exercise

- Prof Wen-Chih Wu (Medical Director, Brown University Health Cardiovascular Wellness and Prevention Center; AACVPR Immediate Past President)
- Asst Prof Tee Joo Yeo (National University Heart Centre, Singapore)

## Team 2: Pro-Medication

- Dr Ngai-Yin Chan (Deputy Hospital Chief Executive, Princess Margaret Hospital)
- Dr Jean-Paul Kovalik (Duke-NUS)

### Team 3: Artificial Intelligence

- Prof Roger Foo (NUS School of Medicine and National University Heart Centre, Singapore)
- Prof Robyn A. Clark (Matthew Flinders Distinguished Emeritus Professor, Flinders University, College of Nursing and Health Sciences)

**01:00PM – 01:10PM**      **Award Presentation and Closing**