

**1st Annual Scientific Meeting of the International
Society of Heart Research Southeast Asia Section
(ISHR-SEA)**

Frontiers in Cardiovascular Research

October 3rd & 4th 2024, Singapore



Meeting venue:
NUSS Kent Ridge Guild House
9 Kent Ridge Dr, Singapore 119241

Organising committee
ISHR-SEA Section Council
Duke-NUS CVMD
NHCS RADO
NUSmed

President:

Roger Foo
(Singapore)

Secretary:

Derek Hausenloy
(Singapore)

Treasurer:

Haojie Yu
Mid-Career Representative
(Singapore)

Council:

Yibin Wang
(Singapore)

Patrick Hsieh
(Taiwan)

Dyah Wulan Anggrahini
(Indonesia)

Lan Hieu Nguyen
(Vietnam)

Yinhua Zhang
(South Korea)

Kamisah Yusof
(Malaysia)

Nipon Chattipakorn
(Thailand)

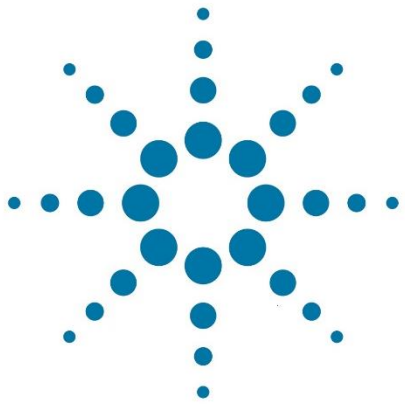
Elena Aisha Binti Azizan
Mid-Career Representative
(Malaysia)

Mick Lee
Early Career Representative
(Singapore)

Cheng Yuan Yuan
Early Career Representative
(Taiwan)

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TO KNOW. TO ACT.

Day 1

Thur October 3rd 2024

07:30-08:00 Registration and poster set-up

08:00-08:05 **Welcome and introductions**
Roger Foo (President ISHR-SEA)
Derek Hausenloy (Secretary ISHR-SEA)
Hao Jie Yu (Treasurer ISHR-SEA)

Brief overview of ISHR-SEA section

08:05-08:40 **Keynote Lecture 1 (30 min talk, 5 min QA)**

Chair: Roger Foo (NUSmed, Singapore)

Borja Ibanez (CNIC Madrid, Spain)

Imaging-based personalized prevention of atherosclerosis

08:40-10:00 **Scientific Session 1: Ischemic heart disease/acute myocardial infarction**
Chairs: Jiong Wei Wang (NUSmed, Singapore), Mark Chan (NUSmed, Singapore)

1. **Yin Hua Zhang (South Korea) (15 min talk)**

Mitochondria transplantation for ischemic cardiovascular diseases

2. **Sarawut Kumphune (Thailand) (15 min talk)**

Applications of anti-serine protease inhibitory protein as a therapeutic agent against myocardial ischemia/reperfusion injury

3. **Lena Ho (Duke-NUS, Singapore) (15 min talk)**

Targeting mitochondrial function for cardioprotection

4. **Satirah Zainalabidin (Malaysia) (10 min talk)**

S-allylcysteine attenuates regional ischemia/reperfusion injury in estrogen-deficient model

5. **Sauri Hernandez (Duke-NUS, Singapore) (10 min talk)**

DJ-1 mimic as novel treatment for acute myocardial infarction

QA session (15 min)

10:00-10:20 **Coffee Break and Poster Viewing**
Shaw Foundation Alumni House

10:20-11:40 **Young Investigator Award Session**
Judging Panel: tbc

1. **Speaker (10 min talk + 5 min QA)**

Title

2. **Speaker (10 min talk + 5 min QA)**

Title

3. **Speaker (10 min talk + 5 min QA)**

Title

4. **Speaker (10 min talk + 5 min QA)**

Title

5. **Speaker (10 min talk + 5 min QA)**

Title

Sponsor talk – Introduction to Vazyme (Shumin Wan) (5min)

11:40-13:00

Scientific Session 2: Heart failure

Chairs: Manvendra Singh (Duke-NUS, Singapore), Matthew Ackers-Johnson (NUSmed, Singapore)

1. **Sung Joon Kim (Seoul, South Korea) (15 min talk)**
Pivotal role of nitric oxide in maintaining contractile function in pulmonary hypertension-induced right ventricular failure
2. **Nipon Chattipakorn (Chiang Mai, Thailand) (15 min talk)**
Potential novel interventions against chemotherapy-induced cardiotoxicity
3. **Han Xiao (Beijing, China) (15 min talk)**
Cardiac adrenergic signalling and inflammatory injury
4. **Kamisah Binti Yusof (Malaysia) (10 min talk)**
Antihypertrophic effects of *Parkia speciosa* pod extract in angiotensin II-exposed H9C2 cardiomyocytes
5. **Bambang Widyanoro (Indonesia) (10 min talk)**
Endothelial to mesenchymal transition responsible for myocardial changes in diabetic cardiomyopathy

QA session (15 min)

13:00-13:45

Lunch and poster viewing
Shaw Foundation Alumni House

13:45-15:05

Scientific Session 3: Regenerative medicine

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Chairs: Lynn Yap (LKC, Singapore), Yibin Wang (Duke-NUS, Singapore)

1. **Yen Wen Liu (Tainan, Taiwan) (15 min talk)**
Hypoimmunogenic human pluripotent stem cells for cardiac regeneration
2. **Chrishan Ramachandra (NHCS, Singapore) (15 min talk)**
Human models of HFpEF for novel target discovery
3. **Soh Boon Seng (A*STAR IMCB, Singapore) (15 min talk)**
Mitochondria: A potential rejuvenation tool against cardiovascular aging
4. **Mick Lee (NUSmed, Singapore) (10 min talk)**
Understanding Cardiomyocyte Cell States and Gene Regulation in the heart
5. **Tay Woan Teng (Duke-NUS, Singapore) (10 min talk)**
RNA Splicing Regulation in Cardiomyocyte Maturation

QA session (15 min)

15:05-15:30

Coffee Break and Poster Viewing
Shaw Foundation Alumni House

15:30-16:50

ISHR-SEA Early Career Investigator Rapid Fire Session

Chairs: Mick Lee (ISHR-SEA ECI rep, Singapore), Cheng Yuan Yuan (ISHR-SEA ECI rep, Taiwan)

1. **Speaker (3 min talk + 5 min QA)**
Title
2. **Speaker (3 min talk + 5 min QA)**
Title

3. **Speaker (3 min talk + 5 min QA)**
Title
4. **Speaker (3 min talk + 5 min QA)**
Title
5. **Speaker (3 min talk + 5 min QA)**
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6. **Speaker (3 min talk + 5 min QA)**
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7. **Speaker (3 min talk + 5 min QA)**
Title
8. **Speaker (3 min talk + 5 min QA)**
Title
9. **Speaker (3 min talk + 5 min QA)**
Title
10. **Speaker (3 min talk + 5 min QA)**
Title

16:50-17:30 **Keynote Lecture 2 (30 min talk, 5 min QA)**

Chair: Yin Hua Zhang (Seoul, South Korea)

Eun Bo Shim (Chuncheon, South Korea)

AI for precision medicine of coronary artery diseases

**Shaw Foundation Alumni House
11 Kent Ridge Dr, Singapore 119244**

17:30-19:30 **Poster moderator session**

Moderators - Alvin Lin (Duke-NUS, Singapore), Pingjin Gao (Shanghai China)

19:30-20:30 **Meeting dinner buffet**

Day 2
Friday 4th October 2024

08:00-09:20 **Scientific Session 4: Innovative technologies**

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JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY

Chairs: Chester Drum (NUSmed, Singapore), Roger Foo (NUSmed, Singapore)

1. **Patrick Hsieh (Taipei, Taiwan) (15 min talk)**
Methods to engineer the cardiac nano-/micro-environments for augmenting the regenerative signalling for spontaneous repair.
2. **Hou Han Wei (LKC, Singapore) (15 min talk)**
Microfluidic chips for modelling atherosclerosis
3. **Su-Yi Tsai (Taipei, Taiwan) (15 min talk)**
Unraveling the Role of RNA-Binding Proteins in Human Cardiac Development and Diseases
4. **Shengjie Lu (NHCS, Singapore) (10 min talk)**
Nitric oxide-releasing nanoparticles for multiple-targeting cardioprotection
5. **Lim Wei Wen (NHCS, Singapore) (10 min talk)**
Interleukin-11 causes acute cardiac electrophysiological dysfunction and predisposes the heart to arrhythmia

QA session (15 min)

09:20-09:55 **Keynote Lecture 3 (30 min talk, 5 min QA)**

Chair: Jean-Paul Kovalik (Duke-NUS, Singapore)

Christopher Newgard (Duke-University, USA)

Sexual dimorphism of branched-chain amino acid metabolism and cardiometabolic disease risk

09:55-10:15 **Coffee Break and Poster Viewing**
Shaw Foundation Alumni House

10:15-11:30 **Scientific Session 5: Joint ISHR Asia-Pacific Sections**

Chairs: Roger Foo (NUSmed, Singapore), Derek Hausenloy (NHCS, Singapore)

1. **Kewal Kishan Talwar (President of ISHR-Indian section) (15 min talk)**
Title tbc
2. **Huang-Tian Yang (Vice President of ISHR-Chinese section) (15 min talk)**
Cell and cell products for cardiac repair
3. **Max Shiang Lim (Council member of ISHR-Australasia section) (15 min talk)**
Sustained delivery of stem cell secretome for cardiac repair
4. **Speaker tbc (15 min talk)- ISHR-Japanese**
Title tbc

QA session (15 min)

11:30-11:50 **JMCC Editors Session**

Panel: Yibin Wang (JMCC Associate Editor), Huang-Tian Yang (JMCC Associate Editor), Roger Foo (JMCC Editor), Yu Huang (JMCC Editor)



Introduction to JMCC journal and JMCC Plus
How to publish in JMCC
Discussion

11:50-12:25 **Keynote Lecture 4 (30 min talk, 5 min QA)**

Chair: David Silver (Duke-NUS, Singapore)

Howard Rockman (Duke University, USA)

Allosteric modulators for the beta1-adrenergic receptor

12:25-13:00 **Lunch and poster viewing**
Shaw Foundation Alumni House

13:00-13:35 **Keynote Lecture 5 (30 min talk, 5 min QA)**

Chair: Derek Hausenloy (NHCS, Singapore)

Thomas Thum (Germany)

Title TBC

13:35-14:55 **Scientific Session 6: Vascular biology**

Chairs: Christine Cheung (LKC, Singapore), Shu Ye (NUS, Singapore)

1. **Kai-Chien Yang (Taiwan) (15 min talk)**

Targeting ER Protein TXNDC5 to Mitigate Myocardial Fibrosis and Atherosclerosis

2. **Yu Huang (Hongkong, China) (15 min talk)**

Laminar flow inhibits vascular calcification

3. **Roshni Singaraja (NUS, Singapore) (15 min talk)**

Bile acids as a novel treatment target for atherosclerosis

4. **Elena Aisha Azizan (Malaysia) (10 min talk)**

Primary aldosteronism: molecular medicine meets public health

5. **Dyah Wulan Anggrahini (Indonesia) (10 min talk)**

Risk stratification and prognosis of Pulmonary Arterial Hypertension: the use of biomarkers.

QA session (15 min)

14:55-15:10 **ISHR-SEA Annual General Meeting**

Roger Foo (President ISHR-SEA)

Derek Hausenloy (Secretary ISHR-SEA)

Hao Jie Yu (Treasurer ISHR-SEA)

15:10-15:30 **Coffee Break and Poster Viewing**
Shaw Foundation Alumni House

15:30-17:00 **Scientific Session 7: Metabolism and Aging**

Chairs: Rijan Gurung (NUSmed, Singapore), Paul Yen (Duke-NUS, Singapore)

1. **Walter Koch (Duke Uni, USA) (15 min talk)**

Heart Failure and Heart-to-Fat Communication- a Role for GRK2

2. **Phillip White (Duke Uni, USA) (15 min talk)**

BCAA biology in cardiometabolic diseases

3. Rana Gupta (Duke Uni, USA) (15 min talk)

Metabolic signaling and obesity

4. Anissa Anindya Widjaja (Duke-NUS, Singapore) (15 min talk)

IL-11 as a therapeutic target healthy aging

5. Haojie Yu (Singapore) (15 min talk)

Genome-scale CRISPR screening for novel pathways regulating LDL uptake

QA session (15 min)

17:00-17:35 **Keynote Lecture 4 (30 min talk, 10 min QA)**

Chair: Enrico Petretto (Duke-NUS, Singapore)

Stuart Cook (NHCS, Singapore)

Discovery and evolution of IL-11

17:35-17:45 Meeting close

Prize giving for best posters and YIA

Notes

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