

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

**Frontiers in Cardiovascular Research**

**October 3<sup>rd</sup> & 4<sup>th</sup> 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)

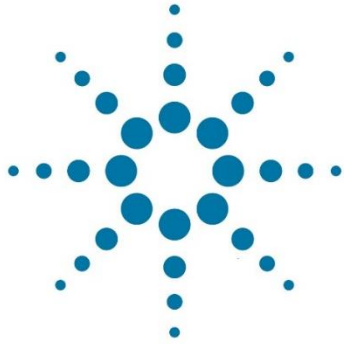
Elena Aisha Binti Azizan  
*Mid-Career Representative*  
(Malaysia)

Mick Lee rana  
*Early Career Representative*  
(Singapore)

Cheng Yuan Yuan  
*Early Career Representative*  
(Taiwan)

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# Day 1

## Thur October 3<sup>rd</sup> 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)**

New precision medicine paradigm for primary prevention of ASCVD: a disease-centric approach

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**

10:20-11:45 **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

**Sponsor talk 1 – Shumin Wan (Vazyme) (5min)**  
Introduction to Vazyme



**Sponsor talk 2 - Jia Kai LIM (Olink) (5min)**  
Revealing the truth of human diseases. Protein by Protein



**Sponsor talk 3 - Aarte Gokhale (IDT) (15min)**



11:45-13:00

**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 Ting (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), Elisa Liehn (NHCS, Singapore)

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

**Day 2**



## Friday 4<sup>th</sup> 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. **Ajay Bahl (Vice President of ISHR-Indian section) (15 min talk)**  
Genetics of Indian cardiomyopathy patients
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)**

**Stuart Cook (NHCS, Singapore)**

Understanding IL11 as a therapeutic target.

13:35-14:55 **Scientific Session 6: Vascular biology**  
**Chairs: Christine Cheung (LKC, Singapore), Shu Ye (NUSmed, Singapore)**

1. **Kai-Chien Yang (Taipei, Taiwan) (15 min talk)**  
Targeting Mechanosensitive Endothelial TXNDC5 to Stabilize eNOS and Reduce Atherosclerosis In Vivo
2. **Yu Huang (Hongkong, China) (15 min talk)**  
Laminar flow inhibits vascular calcification
3. **Roshni Singaraja (NUSmed, Singapore) (15 min talk)**  
Semaphorin 3F in the vascular wall
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)**  
Adipose Tissue Remodeling in Health and Disease
4. **Anissa Anindya Widjaja (Duke-NUS, Singapore) (15 min talk)**  
Inhibition of IL11 signalling extends mammalian healthspan and lifespan
5. **Haojie Yu (NUSmed, 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: Yibin Wang (Duke-NUS, Singapore)**

**Thomas Thum (Germany)**

How to move forwards RNA target structures to clinical application?

17:35-17:45 Meeting close  
Prize giving for best posters and YIA

## Notes

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