

8th International Symposium of New Frontiers in Cardiovascular Research

Istanbul, Turkey
September 26th - 27th, 2024



Meeting Venue

Koc University Hospital, Topkapı, Davutpaşa Cd. No:4, 34010 Zeytinburnu, Istanbul, Turkey
<https://www.kuh.ku.edu.tr/en>

Organising committee

Ece Yurtseven (Istanbul, Turkey)
Hector A. Cabrera-Fuentes (Oaxaca, Mexico)
Derek J. Hausenloy (Singapore)
Klaus T. Preissner (Giessen, Germany)

SCIENTIFIC PROGRAMME

Day 1: Thursday 26th September 2024

09:00 – 09:30 Registration

09:30 – 09:45 Welcome Address

Derek J. Hausenloy (Singapore)
Klaus T. Preissner (Giessen, Germany)
Ece Yurtseven (Istanbul, Turkey)
Dean of Koc University Medical School (Istanbul, Turkey)
Vedat Aytekin (Istanbul, Turkey)

Session 1	Heart Protection-Regeneration	09:45 – 10:45
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Chairs: Carl-Wilhelm Vogel, Hector A. Cabrera-Fuentes

3x15 min talk, 15 min QA

1.1 Klaus T. Preissner (Giessen, Germany)

Targeting cardiovascular diseases with endonucleases

1.2 Manvendra Singh (Singapore)

Semaphorin-plexin-neuropilin signaling and left ventricular non-compaction (LVNC)

1.3 Devrim Gözüaçık (Istanbul, Turkey)

Autophagy in health and disease

Coffee break	10:45 – 11:45
Poster viewing and moderation session (I)	

Moderators:

Carl-Wilhelm Vogel (Hawaii, USA)

Hector A. Cabrera-Fuentes (Oaxaca, Mexico)

Manvendra Singh (Singapore)

Dilek Ural (Istanbul, Turkey)

Session 2	Cardiovascular Disease and More	11:45 – 13:00
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Chairs: Klaus T. Preissner, Indrajit Banerjee

4x15 min talks, 15 min QA

2.1 Elisa Liehn (Singapore)

Phospholipids in cardiovascular diseases

2.2 Jürgen Bernhagen (Munich, Germany)

Role of new MIF proteins in cardiovascular disease

2.3 Stefano Romeo (Gothenburg, Sweden)

Human and molecular genetics of steatotic liver disease

2.4 Marianne Benn (Copenhagen, Denmark)

Obesity and cardiovascular disease risk

Lunch **13:00 – 14:30**
Poster viewing and moderation session (II)

Moderators:

Elisa Liehn (Odense, Denmark)
Jürgen Bernhagen (Munich, Germany)
Coert J Zuurbier (Amsterdam, The Netherlands)
Peter Ferdinandy (Budapest, Hungary)

Session 3 **Technologies, Targets and Therapies** **14:30 – 17:30**

Chairs: Erol Tülümen, Manvendra Singh

4x15 min talks, 15 min QA

3.1 Peter Ferdinandy (Budapest, Hungary)

Discovery and development of miRNA therapeutics for cardioprotection and other indications

3.2 Ender Ödemiş (Istanbul, Turkey)

Three dimensional modelling and simulations in the treatment of congenital heart disease

3.3 Coert J Zuurbier (Amsterdam, The Netherlands)

Malonate at reperfusion increases RISK pathway and 4-HNE in hearts with high glucose metabolism and associates with loss of cardioprotection against ischemia-reperfusion injury

3.4 Kemal Baysal (Istanbul, Turkey)

An *in vitro* co-culture model to study exosomes in vascular cell communication

Coffee break **15:45 – 16:15**

Session 3 cont. Technologies, Targets and Therapies **16:15 – 17:30**

Chairs: Peter Ferdinandy, Dilek Ural

5x15 min talks, 15 min QA

3.5 Thomas Krieg (Cambridge, UK)

Clinical development of acidic malonate in ischemia-reperfusion Injury

3.6 Hector A. Cabrera Fuentes (Oaxaca, Mexico)

Mechanistic insights into eRNA and TNF- α /TNF-Receptor 1 interplay in cardioprotection

3.7 Müjdat Zeybel (Istanbul, Turkey)

Integrative proteo-transcriptomic characterization of advanced fibrosis in chronic liver disease across etiologies

3.8 Jiong-Wei Wang (Singapore)

Promise of milk-derived extracellular vesicles in cardiometabolic diseases

3.9 Indrajit Banerjee (SSR College, Mauritius)

Cardiac complications due to COVID-19 vaccines

Day 2: Friday 27th September 2024

Session 4 **Cardiovascular Risk Factors** **09:15 – 11:00**

Chairs: Alev Arat Özkan, Anamika Singh

5x15 min talks, 25 min QA

4.1 Derek Hausenloy (Singapore)

Challenges and opportunities with cardioprotection

4.2 Özlem Yalçın (Istanbul, Turkey)

Blood mechanical damage: Pathophysiology and clinical consequences

4.3 Lale Tokgözoğlu (Ankara, Turkey)

Atherosclerotic vascular disease and LDL-cholesterol : Why is lower better?

4.4 Roshni R. Singaraja (Singapore)

2-deoxyuridine associates with recurrent coronary events

4.5 Meral Kayıkçıoğlu (Izmir, Turkey)

Clinical studies in familial hypercholesterolaemia

Coffee break

11:00 – 11:30

Session 5 **Abstract Presentation** **11:30 – 12:45**

Chairs:

Hector A. Cabrera-Fuentes, Ece Yurtseven, Klaus T. Preissner, Derek Hausenloy

5x8 min talks, 20 min QA

5.1 Dila Atak (Istanbul, Turkey)

Pericytes Play A Protective Role During Neuroinflammation

5.2 Shaghayegh Soleimani (Istanbul, Turkey)

The Impact of Epigenetic Modifications of GCKR on Metabolic Associated Steatotic Liver Disease (MASLD)

5.3 Pınar Cevikbaş Ilik (Ankara, Turkey)

Magnolia Officinalis provides cardioprotection from myocardial damage by modulating mitochondria function

5.4 Demet Kul (Istanbul, Turkey)

Comparative Analysis of Fiber Orientation and Density in Commercial Porcine and Native Human Heart Valves: Implications for Clinical Use

5.5 Hande Uludağ (Istanbul, Turkey)

The Use of Cell-Free DNA Methylation as a Biomarker for Fibrosis: Data from MASLD Patients

Group Photo	12:45 – 13:00
Lunch	13:00 – 14:00

Session 6	Molecular Mechanisms of Heart Disease	14:00 – 15:30
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Chairs: Kemal Baysal, Jürgen Bernhagen

4x15 min talks, 20 min QA

6.1 Paul Yen (Singapore)

Metabolic dysfunction-associated steatohepatitis has a direct role in the pathogenesis of heart failure with preserved ejection fraction (HFpEF)

6.2 Zsuzsanna Helyes (Pécs, Hungary)

Mitochondrial uncoupling protein 2 mediates inflammatory cardio-pulmonary dysfunctions: *in vivo* rat studies

6.3 Belma Turan (Ankara, Turkey)

Contribution of electrotonic conduction by non-myocytes to cardiomyocyte electrical activity in insulin-resistant hearts

6.4 Chrishan Ramachandra (Singapore)

Myeloperoxidase - a key mediator in the pathogenesis of heart failure with preserved ejection fraction (HFpEF)

Coffee break	15:30 – 16:00
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Session 7	Closing Session	16:00 – 17:00
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- **Announcement: 9th Meeting “New Frontiers in Cardiovascular Research”**
- **Prize Giving (top 3 posters and best young investigator presentation)**
- **Concluding remarks**
Derek J. Hausenloy (Singapore)
Klaus T. Preissner (Giessen, Germany)
Ece Yurtseven (Istanbul, Turkey)

End of Scientific Meeting
