DUKE

Denmark, UK, and Italy in GEnova

First Edition

Conference Hall
Department of Internal Medicine
University of Genova
Viale Benedetto XV, 6 - 16132 Genova

July 3rd 2025

Decoding the Heart:
Mechanisms, Models, and Molecular Therapies

University of Copenhagen, DK
University of Oxford, UK
Imperial College London, UK
University of Bologna, IT
University of Genova, IT

Sponsored by

***M*appingLab**
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DUKE is a cardiovascular research symposium bringing together international experts from Denmark, United Kingdom and Italy in GEnova to discuss recent findings and perspectives in the field. The first edition will be held at the Conference Hall of the *Department of Internal Medicine* (DiMI), University of Genova, Italy.

Duke is organised by:

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Member of the HFA Scientific Committee on Basic & Translational Research
Secretary of the ESC Council of Cardio-Oncology

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8:30 – 9:00
Registration

9:00 – 9:10
Welcome and introduction

I) Cardiovascular theranostics
Chair: **Luca Soattin** (University of Copenhagen, DK)

9:10 – 9:25
Cell-based cardioprotective therapies
Sveva Bollini (University of Genova, IT)

9:25 – 9:40
Molecular imaging of atherosclerosis
Alessandro Maino (University of Oxford, UK)

9:40 – 9:55
Cardiomyocyte-targeted approaches
Ambra Costa (University of Genova, IT)

9:55 – 10:10
Discussion

10:10 – 10:30
Break

II) Mechanisms of arrhythmias
Chair: **Pietro Ameri** (University of Genova, IT)

10:30 – 10:45
Endurance training remodels pulmonary veins and promotes atrial fibrillation
Alicia D'Souza (Imperial College London, UK)

10:45 – 11:00
Targeting SK-channels in the pulmonary veins to reduce atrial ectopies
Andreina Gil Ramirez (University of Copenhagen, DK)

11:00 – 11:15
Large animal models in translational research of cardiac arrhythmias
Thomas Jespersen (University of Copenhagen, DK)

11:15 – 11:30
Discussion

III) Hormonal, metabolic and cell regulation of the heart
Chair: **Thomas Jespersen** (University of Copenhagen, DK)

11:30 – 11:45
Mitochondrial calcium-handling in heart failure and inherited cardiomyopathies
Edoardo Bertero (University of Genova, IT)

11:45 – 12:00
Glucagon-like peptide 1 and its effect on the sinus node
Anniek Frederike Lubberding (University of Copenhagen, DK)

12:00 – 12:15
Modulation of intermediate filaments proteome in heart failure
Giulio Agnetti (University of Bologna, IT)

12:15 – 12:30
Discussion

12:30 – 14:00
Lunch

IV) Novel technologies and approaches in cardiovascular science
Chair: **Alicia D'Souza** (Imperial College London, UK)

14:00 - 14:15
Optical mapping systems to illuminate the electrical activity of the heart
Yatong Li (*M*appingLab, Oxford UK)

14:15 - 14:30
'In vitro' reprogramming of fibroblasts from human cadavers for iPSC-CMs generation
Emma Helena Meibom (University of Copenhagen, DK)

14:30 – 14:45
Laser optoporation for action potential recordings in iPSCs-CMs
Michele Dipalo (Foresee Biosystems, Genova IT)

14:45 – 15:00
Discussion

V) Inflammation and cardiovascular diseases
Chair: **Sveva Bollini**

15:00 – 15:15
The role of inflammation in age-related sinus node dysfunction
Megan Katie McKie (University of Copenhagen, DK)

15:15 - 15:30
Cardiovascular inflammaging
Luca Liberale (University of Genova, IT)

15.30 - 15:45
The NLRP3 inflammasome as a target for atrial fibrillation
Arnela Šaljić (University of Copenhagen, DK)

15:45 – 16:00
Discussion

16:00 – 16:10
Concluding remarks