

Programme

Sunday

Monday

Tuesday

Wednesday

POSTERS

Sunday, 23 June

11:00-14:00

SHVM Board Meeting

14:00-18:00

Registration

14:30-16:30

Trainee Workshop sponsored by Elsevier

iPS-cell-derived cardiomyocytes as model system

CHAIR: MIRANDA NABBen (Maastricht, The Netherlands)

SPEAKERS:

Robert Passier (*Leiden, The Netherlands*)

Roselle Gelinas (*Montreal, QC, Canada*)

Paul Wijnker (*Amsterdam, The Netherlands*)

16:45-17:45

Oroboros Workshop

Eric Gnaiger

High-resolution respirometry, Oroboros O2k

Opening Session

18:00-18:15

Welcome to Amsterdam

Jan Glatz, Coert Zuurbier, Terje Larsen

18:15-19:15

Keynote Lecture

CHAIR: COERT ZUURBIER (Amsterdam, The Netherlands)

Ronald Wanders (*Amsterdam, The Netherlands*)

Inborn errors of cardiac metabolic disease

19:15-21:00

Informal dinner reception

Sunday**Monday****Tuesday****Wednesday****POSTERS**

Monday, 24 June

Session 1 – Targeting cardiac fatty acid metabolism (carnitine, PUFA, FA uptake)

CHAIRS: DALE ABEL (IOWA CITY, IA, USA) AND XIAO-WEI CHEN (BEIJING, CHINA)

- 8:30–9:00 **Sander Houten** (*New York, NY, USA*)
Carnitine and mitochondrial (dys)function in cardiac disease
- 9:00–9:30 **L. Ashley Cowart** (*Richmond, VA, USA*)
Lipotoxicity in the heart
- 9:30–9:45 *Short talk:* **Marina Makrecka-Kuka** (*Riga, Latvia*)
Targeting long-chain acylcarnitine content as a novel strategy to treat cardiometabolic diseases
- 9:45–10:00 *Short talk:* **Laurent Bultot** (*Bruxelles, Belgium*)
Increase in protein acetylation, a hallmark of cardiac metabolic stress by metabolic overfueling. The example of cardiac glucose uptake inhibition by fatty acids

10:00–10:30 Coffee break

CHAIRS: MICHAEL SCHWARZER (JENA, GERMANY), ADAM WENDE (BIRMINGHAM, AL, USA)

- 10:30–11:00 **Matthieu Ruiz** (*Montreal, Canada*)
Peroxisomal-related lipids in metabolic and heart diseases
- 11:00–11:30 **Joost Luiken** (*Maastricht, The Netherlands*)
Vacuolar H⁺-ATPase as regulator of cardiac metabolism
- 11:30–11:45 *Short talk:* **Iain Scott** (*Pittsburgh, PA, USA*)
Adropin treatment restores cardiac glucose oxidation in pre-diabetic obese mice
- 11:45–12:00 *Short talk:* **Ily Geraets** (*Maastricht, Netherlands*)
Metabolic interventions to treat hypertrophy-induced contractile dysfunction *in vitro*.

12:00–13:00 Working Lunch sponsored by QIAGEN

Jean-Noel Billaud (*QIAGEN Bioinformatics, Redwood City, CA, USA*)
title to be announced

Session 2 – Targeting whole-body glucose metabolism: SGLT2 inhibitors for DM and HF treatment

CHAIRS: CHRISTOPH MAACK (WÜRZBURG, GERMANY), JEANINE PROMPERS (UTRECHT, NETHERLANDS)

13:00-13:30	Juan Badimon (<i>New York, NY, USA</i>) Beneficial effects of SGLT2 inhibitors on post-MI cardiac remodeling and metabolism in a non-diabetic porcine model
13:30-14:00	Michael Lehrke (<i>Aachen, Germany</i>) SGLT2 effects on cardiac metabolism and function in T2DM
14:00-14:30	Julian Mustroph (<i>Regensburg, Germany</i>) Empagliflozin, CamKII and GLUT1 in heart failure
14:30-14:45	<i>Short talk:</i> Salva Yurista (<i>Groningen, Netherlands</i>) Sodium-glucose co-transporter 2 inhibition with Empagliflozin improves cardiac function in non-diabetic rats with heart failure after myocardial infarction
14:45-15:00	<i>Short talk:</i> Paul Wijnker (<i>Amsterdam, Netherlands</i>) Empagliflozin corrects impaired relaxation in human engineered heart tissue carrying a <i>MYH7</i> mutation
15:00-16:30	Poster Session I (with coffee and refreshments)
17:30-22:00	Discover Amsterdam: Canal boat tour with guide through Amsterdam Diner at the Waterfront Amsterdam Boat trip back to hotel

Tuesday, 25 June

8:30–9:30

Special Keynote Lecture/Dutch Heart Foundation Lecture

CHAIR: LINDA PETERSON (ST. LOUIS, MO, USA)

Renée Ventura-Clapier (*Paris, France*)

Gender issues in cardiovascular medicine

9:30–10:00

Coffee break

Session 3 – Metabolic targets to combat cardiac IR injury

CHAIRS: TORSTEN DOENST (JENA, GERMANY), JOHN CHATHAM (BIRMINGHAM, AL, USA)

10:00–10:30

Lisa Heather (*Oxford, UK*)

Targeting metabolism to reduce cardiac IR injury in diabetes

10:30–11:00

Thomas Krieg (*Cambridge, UK*)

Targeting mitochondrial redox pathways during ischaemia/reperfusion

11:00–11:30

Ioanna Andreadou (*Athens, Greece*)

SGLT2 inhibitors for reducing cardiac IR injury

11:30–11:45

Short talk: **Shubham Soni** (*Edmonton, AL, Canada*)

Skeletal muscle-specific knock-out of SCOT prevents the decline in cardiac function during heart failure

11:45–12:00

Short talk: **Neoma Boardman** (*Tromsø, Norway*)

Obese and diabetic hearts are protected from adverse effects of an acute high FA-load

12:00–13:00

Lunch

13:15–14:30

Poster Session II

Session 4 – Novel approaches for metabolic modulation

CHAIRS: LUC BERTRAND (BRUSSELS, BELGIUM), FLORIN DESPA (LEXINGTON, KY, USA)

14:30–15:00

Thomas Pulinilkunnil (*Saint John, Canada*)

Autophagy and cardiomyopathy

15:00–15:30

Mathias Mericskay (*Paris, France*)

Nicotinamide riboside for the treatment of heart failure

15:30-15:45	<p><i>Short talk: Vincent Portero (Amsterdam, Netherlands)</i></p> <p>Branched chain amino acid (BCAA) metabolism: a new link between metabolic syndrome and cardiac arrhythmias</p>
15:45-16:00	<p><i>Short talk: Yun Chen (New York, NY, USA)</i></p> <p>Regulation of the mitochondrial ATP synthase by chaperone-mediated autophagy: a novel pathway to heart failure</p>

16:00-16:30	Coffee break
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Session 5 – The "William C. Stanley" Early Investigator Awards

CHAIRS: CHRISTINE DES ROSIERS (MONTREAL, QC, CANADA), HEIKO BUGGER (GRAZ, AUSTRIA)

16:30-16:45	<p>Claudia Correia (Skövde, Sweden)</p> <p>Integration of metabolic and transcriptomic profiling of chronic ischemic heart failure reveals potential therapeutic targets for cardiac dysfunction</p>
16:45-17:00	<p>Matt Kerr (Oxford, UK)</p> <p>Energetic dysfunction in the type 2 diabetic myocardium is rescued by the deacetylase activator honokiol</p>
17:00-17:15	<p>Mark Pepin (Birmingham, AL, USA)</p> <p>DNA methylation reprograms cardiac metabolic gene expression in end-stage human heart failure</p>
17:15-17:30	<p>Laween Uthman (Amsterdam, Netherlands)</p> <p>Empagliflozin acutely increases bicarbonate (HCO₃⁻) and glucose uptake in healthy and diabetic isolated mouse hearts</p>

19:30	Dinner (congress venue), followed by Amsterdam DJ
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Wednesday, 26 June

9:00-10:00

"William C. Stanley" Award Lecture

CHAIR: TERJE LARSEN (TROMSØ, NORWAY)

Kieran Clarke (Oxford, UK)

Exogenous ketones for the heart?

10:00-10:30

Coffee break

Session 6 - MitoROS as main driver of cardiac diseases?

CHAIRS: THOMAS KRIEG (CAMBRIDGE, UK), ELLEN AASUM (TROMSØ, NORWAY)

10:30-10:55

Heiko Bugger (Graz, Austria)

MitoROS in ischemia-reperfusion and remodelling

10:55-11:20

Jolanda van der Velden (Amsterdam, The Netherlands)

MitoROS in hypertrophic cardiomyopathy

11:20-11:45

Christoph Maack (Würzburg, Germany)

MitoROS in heart failure

11:45-12:00

Short talk: **Helena Kenny** (Iowa City, IA, USA)

Inducible deletion of OPA1 in the heart Induces ER stress that precedes mitochondrial and contractile dysfunction

12:00-12:15

Short talk: **Jaetaek Kim** (Seoul, Republic of Korea)

RANKL blockade suppresses pathological angiogenesis and vascular leakage in an oxygen-induced retinopathy model

12:15-12:30

Invitation to SHVM 2020

12:30-12:45

Concluding Remarks

12:45

Buffet lunch and Adjourn