ARTIFICIAL INTELLIGENCE
in Cardiovascular Disease

23
LONDON

ARTIFICIAL INTELLIGENCE AND HEALTH TECHNOLOGIES in Cardiovascular Disease

A Cardiology Update Meeting
September 20-21, 2023
VIRTUAL MEETING

Course Directors
Charalambos Antoniades
Alexander Lyon
Alan Maisel
Thomas F. Lüscher

Scientific
Coordination
Ruth Amstein

Under the auspices of

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In partnership with

British
Cardiovascular
Society

Event endorsed by

ESC
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of Cardiology

Dear Colleagues

Artificial intelligence and digital health are rapidly evolving disciplines and will be transforming healthcare. Applications of AI in cardiovascular medicine are machine learning techniques for diagnostic procedures including imaging modalities, biomarkers and predictive analytics for personalised therapies and improved outcomes. Fields of application include genetics, multiomics, cardiometabolic and valve disease, cardiomyopathy, and many more.

We have brought together key opinion leaders and recognised experts in the field of AI to provide an insight on their experience, new applications and the impact of AI on future clinical decision making.

The target audience are cardiologists, oncologists, cardiac surgeons, internists, endocrinologists as well as imaging and device specialists from clinics and industry.

We would be happy to welcome you on September 20th-21st this year at the Hallam Conference Centre in London and look forward to seeing you.

With best regards, Yours sincerely,

| Charalambos Antoniades | Alex Lyon | Alan Maisel | Thomas F. Lüscher |

WEDNESDAY, September 20th, 2023, UK TIME

Time		
16:00	SESSION 1: OPENING SESSION *Chairs: Charalambos Antoniades and Alexander Lyon*	
16:00	Welcome and introduction	T. F. Lüscher, London
16:10	AI in the diagnosis of fibrillation	P. Friedman, Rochester
16:30	Q&A	
16:40	Wearable tools to diagnose arrhythmias	A. Bauer, Innsbruck
17:00	Q&A	
17:10	Data science and AI in cardiovascular imaging	p. Leeson, Oxford
17:30	Q&A	
17:40	The marriage of biomarkers and machine learning in acute CVD	A.S. Maisel, San Diego
18:00	Q&A	
18:10	Wearable cardiac ultrasound imager: a new frontier	S. Xu, San Diego
18:30	Q&A	
18:45	Wrap Up Session 1	

THURSDAY, September 21st, 2023, UK TIME

Time		
09:00	SESSION 2: MACHINE LEARNING FOR RISK AND OUTCOME PREDICTION *Chairs: Alan S. Maisel and Thomas F. Lüscher*	
09:00	Using AI to predict CV risk from routine CT	C. Antoniades, Oxford
09 :15	Q&A	
09:20	Machine -learning based prediction of in-hospital death for patients with Tako-Tsubo Syndrome *(2020 Acute Coronary Syndromes (ACS) in Patients Presenting without Persistent ST-Segment Elevation (Management of) Guidelines)*	O. De Filippo, Turin
09:35	Q&A	
09:40	Risk prediction in the acute setting in males and females with NSTE-ACS: The Grace 3 Score *(2020 Acute Coronary Syndromes (ACS) in Patients Presenting without Persistent ST-Segment Elevation (Management of) Guidelines)*	F. Wenzl, Zurich
09:40	Q&A	
10:00	The future of digital tools for outcome prediction	D. Kotecha, Birmingham
10:15	Q&A	
10:20	Wrap Up Session 2	
10:30	COFFEE BREAK	
11:00	SESSION 3: GENETICS AND PROTEOMICS *Chairs: John E. Deanfield and Emma Svennberg*	
11:00	Polygenic risk scores or machine learning in predicting coronary artery disease status	H. Schunkert, Munich
11:15	Q&A	
11:20	Proteomics-enabled deep learning machine algorithms can enhance prediction of mortality	K.-P. Kresoja, Leipzig
11:35	Q&A	
11:40	tbd	C. Macrae, Boston
11:55	Q&A	
12:00	Wrap Up Session 3	
12:15	LUNCH BREAK	
13:15	SESSION 4: IMAGING AND DIGITAL ALGORITHMS *Chairs: tbd and Charalambos Antoniades*	
13:15	AI to phenotype adipose tissue and cardiometabolic disease	E. Oikonomou, New Haven
13:30	Q&A	
13:35	AI to measure coronary artery flow	J. Moon, London
13:50	Q&A	
13:55	AI as a diagnostic tool for valve disease *(2021 ESC/EACTS Guidelines for the management of valvular heart disease)*	J.J. Bax, Leiden
14:10	Q&A	
14:15	Medical value and use of digital algorithms in decision making support	S. Blankenberg, Hamburg
14:30	Q&A	
14:35	Wrap Up Session 4	
14:15	COFFEE BREAK	

15:15	SESSION 5: CLINICAL APPLICATIONS OF AI	
	Chairs: Alan Maisel and Thomas F. Lüscher	
15:15	Guidelines and risk prediction: How to include AI in secondary prevention	F. Asselbergs, Amsterdam
	(2021 ESC Guidelines on cardiovascular disease prevention in clinical practice)	
15:30	Q&A	
15:35	Ethics and digital health tools	E. Caiani, Milan
15:50	Q&A	
15:55	AI in the diagnosis and management of arrhythmia	E. Svennberg, Stockholm
16:10	Q&A	
16:15	AI in transthyretin cardiac amyloidosis: I si t time for clinical application?	M. Grogan, Rochester
16:30	Q&A	
16:35	New advances in troponin measurements	A. Maisel, San Diego
16:50	Q&A	
16 :55	Wrap Up Session 5	
17 :00	CLOSING REMARKS	

Teaching Faculty

Charalambos Antoniades
University of Oxford
Oxford, UK

Folkert Asselbergs
Amsterdam Heart Center
Amsterdam, NL

Axel Bauer
University Hospital Innsbruck
Inssbruck, AT

Jeroen J. Bax
Leiden University Medical Center
Leiden, NL

Stefan Blankenberg
University Heart & Vascular Center
Hamburg, DE

Enrico G. Caiani
Politecnico die Milano
Milano, IT

Ovidio De Filippo
University of Turin
Turin, IT

John E. Deanfield
University College London
London, UK

Martha Grogan
Mayo Clinic
Rochester, MN, USA

Paul A. Friedman
Mayo Clinic
Rochester, MN, USA

Dipak Kotecha
University of Birmingham
Birmingham, UK

Karl-Patrik Kresoja
Heart Center of Leipzig
Leipzig, DE

Paul Leeson
John Radcliffe Hospital
Oxford, UK

Thomas F. Lüscher
Royal Brompton and Harefield hospitals
London, UK

Alexander Lyon
Royal Brompton and Harefield hospitals
London, UK

Calum Macrae
Brigham and Women's Hospital
Boston, MA, USA

Alan S. Maisel
VA San Diego Healthcare System
San Diego, CA, USA

James Moon
University College London
London, UK

Evangelos Oikonomou
Yale School of Medicine
New Haven, CT, USA

Heribert Schunkert
German Heart Centre Munich
Munich, DE

Emma Svennberg
Karolinska University Hospital
Stockholm, SE

Florian Wenzl
University of Zurich
Zurich, CH

Sheng Xu
University of California, San Diego
San Diego, CA, USA

Registration
Registrations can be made exclusively online on our website:
www.zhh.ch/en/events/ai2023

Registration
Early registration fee (August 20, 2023)
Regular fee   GBP 105
Residents, students (age<40)   GBP 50

Registration fee from August 21, 2023
Regular fee   GBP 115
Residents, students (age<40)   GBP 50

Registration will be confirmed upon receipt of payment.

Modification & Cancellation
All modifications or cancellations must be notified in writing (by mail, fax
or e-mail to the Zurich Heart House. For each modification requested by
the participant, GBP 15 will be charged for administrative costs. In case of
cancellation up to September 1st, 2023 deposits will be refunded less
35% for administrative costs. After this date, no refund will be possible.

Venue
VIRTUAL MEETING

Accreditation
'Artificial Intelligence and Health Technologies in Cardiovascular Disease 2023' has been
accredited by the European Accreditation Council for Continuing Medical Education
(EACCME®) with 9 European CME credits (ECMEC®s) and approved by the Federation of the
Royal Colleges of Physicians of the United Kingdom for 10 category 1 (external) CPD credit(s).

Organisation
Zurich Heart House, Foundation for Cardiovascular Research
Dr. Ruth Amstein, ruth.amstein@zhh.ch
Christine Lohmann, christine.lohmann@zhh.ch
Hottingerstrasse 14, CH-8032 Zurich, Switzerland
P +41 44 250 40 83, F +41 44 250 40 90
zhh.ch

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