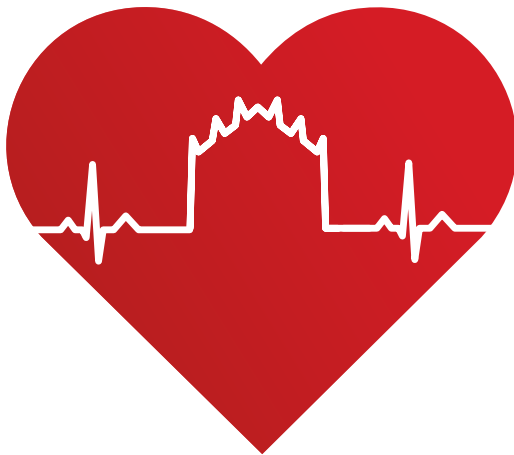


**HYBRID
CONFERENCE**

OCTOBER 2-3, 2026 | PROGRAM



Milano (Italy)

Multidimensional Approach to Cardiac Arrhythmias: Role of ECG in the Artificial Intelligence Era

2026 International Congress on Electrocardiology

Dissemination Session of *PNRR-MCNT2-2023-12378472*

**Predicting Disease Progression in Atrial Fibrillation:
A Multiparametric Approach for Prognostic Marker Identification
and Personalized Patient Management**



**Funded by
the European Union**

NextGenerationEU

*Funded by the European Union - NextGenerationEU - PNRR M6C2 - Investment 2.1
Enhancing and strengthening biomedical research within the Italian National Health Service*

*Project code PNRR-MCNT2-2023-12378472
CUP code E53C24000850001*



**I.R.C.C.S. Policlinico
San Donato**
Gruppo San Donato

COMMITTEE

LOCAL SCIENTIFIC COMMITTEE

Prof. Carlo Pappone

IRCCS Policlinico San Donato (Mi)

Emanuela Teresina Locati

IRCCS Policlinico San Donato (Mi)

SCIENTIFIC COMMITTEE

Adrian Baranchuk

Universidad Abierta Interamericana, Buenos Aires - Argentina

Laura Burattini

Università Politecnica delle Marche, Ancona - Italy

Iwona Cygankiewicz

Medical University of Lodz - Poland

Parvin Dorostkar

University of Minnesota Medical Center, Fairview, MN - USA

Malgorzata Kurpesa

Medical University of Lodz - Poland

Manlio Marquez

Instituto Nacional de Cardiología "Ignacio Chavez", Ciudad de Mexico - Mexico

Pyotr Platonov

Lund University - Sweden

Elena Zaklyaminskaya

Petrovsky Russian Research Centre of Surgery 2, Moscow - Russia



**I.R.C.C.S. Policlinico
San Donato**
Gruppo San Donato

08:30-09:00	Welcome address <i>Lorenzo Menicanti - Emanuela T. Locati</i>
09:00-10:00	Plenary Lecture Moderators - <i>Lorenzo Menicanti, Adrian Baranchuk</i> Role of ECG in the Early Diagnosis of Risk of Sudden Cardiac Death - <i>Carlo Pappone</i>
10:00-11:00	Mechanisms & Substrates of Cardiac Arrhythmias and their Relation to Surface ECG Session Moderators - <i>Manlio Marquez, Ilaria Rivolta</i> Cellular mechanisms of ventricular arrhythmias and relation to surface ECG - <i>Mark Potse</i> Role of fibrosis, inflammation, immunity and remodeling in arrhythmogenesis - <i>Luigi Anastasia</i> Interaction of ischemia with cellular mechanisms of arrhythmogenesis - <i>Antonio Zaza</i> Discussion
11:00-11:30	Coffee Break
11:30-12:30	From Genotype to ECG Phenotype: Risk Stratification and Precision Care in Arrhythmogenic Diseases Session Moderators - <i>Pyotr Platonov, Michele Oppizzi</i> SCN5A-related channelopathies: Brugada syndrome, LQT3 and Sick sinus syndrome - <i>Manlio Marquez</i>  LQTS: Integrating ECG, Genetics and imaging for individualized risk prediction - <i>Wojciech Zareba</i> Identification of the arrhythmogenic substrates of mitral valv prolaps <i>Antonio Boccellino</i> Discussion
12:30-13:30	Clinical Challenges and Novel Therapies in Arrhythmogenic Cardiomyopathies Session Moderators - <i>Iwona Cygankiewicz, Luigi De Ambroggi</i> Arrhythmogenic cardiomyopathy - Evolving definition - <i>Pyotr Platonov</i> Personalized pharmacologic therapies in different arrhythmogenic disease phenotypes - <i>Mori Krantz</i> Role of imaging techniques in identifying arrhythmogenic substrates - <i>Pietro Spagnolo</i> Discussion
13:30-14:30	Lunch

14:30-15:30 | **ECG Markers in the Precision Diagnosis of Sudden Cardiac Death**
Session Moderators - *Giuseppe Bagliani, Jennifer Streeter, Michele Oppizzi*

QRS fragmentation and Hemiblocks - *Cinzia Crescenzi*

Brugada patterns and phenocopies - *Adrian Baranchuk*

QT Interval and QT dynamics - *Emanuela T. Locati*

Discussion

15:30-16:30 | **Precision Diagnosis of Sudden Cardiac Death**
Session Moderators - *Mori Krantz, Gabriele Negro*

Electrocardiographic diagnosis of arrhythmogenic cardiomyopathies - *Malgorzata Kurpesa*

Role of Implantable Cardiac Monitoring (ICM) in Arrhythmogenic Cardiomyopathies - *Derek Connelly*

Role of structural genes in Channelopathies - *Sara Benedetti*

Discussion

16:30-17:00 | **Coffee Break**

17:00-18:00 | **AI Models, Prospectives and Ethical Concerns**
Session Moderators - *Peter Macfarlane, Raffaele Salerno*

Models and Roles of AI in Cardiovascular Disease Diagnosis and Management - *Andrea Saglietto*



Application of AI model in multiparametric evaluation in cardiac patients - *Antonio Ribeiro*

Ethical, Legal and Regulatory Challenges of Artificial Intelligence in Healthcare - *Enrico Caiani*

Discussion

18:00-19:00 | **ISE General Assembly**

10:00-11:00

From Physiology to ECG Digital Models

Session Moderators - *Laura Burattini, Massimo Rivolta*



Artificial Computational Modelling and ECG simulation of the Human Heart - *Axel Loewe*

Atrial and ventricular ECG Modeling for the Identification of Cardiac Arrhythmias - *Peter van Dam*

AI based ECG prediction of cardiac arrhythmias:
Does precision matter? - *Peter Macfarlane*

Discussion

11:00-11:30

Coffee Break

11:30-12:30

AI in ECG analysis and big-data mining

Session Moderators - *Constantinos Bakogiannis, Luigi Anastasia*

Prognostic role of electrocardiographic alternans in wearable and implantable devices - *Laura Burattini*

Role of AI in the detection of Brugada pattern in digital ECG -
Edward Grant

Role of AI and LLM in the analysis of unstructured clinical
databases - *Marco Pancotti and Sara Paratico*

Discussion

12:30-13:30

ECG and AI in Preventing Sudden Cardiac Death in the Young

Session Moderators - *Daniel Cortez, Gabriele Vignati*

Preventing sudden death in infants and children - *Parvin Dorostkar*

Non invasive evaluation of arrhythmic risk in congenital heart
disease - *Daniel Cortez*



Differences between competitive and tactical athletes in sudden death
rates - *Mark Hagney*

Discussion

13:30-14:30

Lunch - ISE COUNCIL MEETING

14:30-15:30 | **Multiparametric Risk stratification of Ischemic Disease and Heart Failure**

Session Moderators - *Maurizio Lunati, Manlio Marquez*



Stemi versus acute occlusion myocardial infarction: new paradigms - *Yochai Birnbaum*



Role of surface ECG in physiologic cardiac pacing - *Krzysztof Kaczmarek*

Role of Sleep Apnea in cardiac arrhythmias and heart failure - *Carolina Lombardi*

Discussion

15:30-16:30 | **ISE ISHNE YIA Abstract Session**

Session Moderators - *Parvin Dorostkar, Pyotr Platonov*

Toward Accessible Electrocardiographic Imaging: Patient-Specific Left Atrial Mesh Construction from 2D Echocardiography - *J. Mortada*

Closing the Diagnostic Gap: Wearable-Based Remote ECG Monitoring in Patients with Unexplained Palpitations and (Pre-)Syncope - *L. Bliudžiūtė*

Identification of Atrial Fibrillation and Its Anatomical Origin Through Differentially Expressed Genes - *M. Gjika*

Patient-Acquired Six-Lead ECGs During Prolonged Wrist-Worn Monitoring: Initial Evaluation of Recording Quality, Interpretability, and Interpretation Workload - *M. Smetaninas*

Temporal Changes in Short-Term Heart Rate Variability Predict Long-Term Mortality After Acute Myocardial Infarction - *N. Marković*

Catheter Sampling and Cross-System Differences in Left Atrial Low-Voltage Area Quantification - *S. Paratko*

Disconnection in remote monitoring of cardiac implantable electronic devices: a real-life multiplatform assessment - *V. L. Caputo*

Discussion

16:30-17:00 | **Coffee Break**

17:00-18:00 | **e-health Telemedicine 2.0**

Session Moderators - *Mori Krantz, Gabriele Zanutto*

Novel telemedicine scenarios for detection and management of atrial fibrillation and heart failure - *Gabriele Zanutto*



Telemedicine in management of arrhythmias in vulnerable patients: The case of women with eating disorders - *Ewa Piotrowicz*



New AI challenges for Telemedicine: Where to go from here - *Polychronis Dilaveris*

Discussion

08:00-09:00 | **ISHNE Board**

09:00-09:30 | **Introduction**

The PAMP-FA Project - Integrating Electrophysiology, Imaging, and Comorbidity Assessment - *Emanuela T. Locati*

09:30-10:30 | **Multidisciplinary Approach to AF diagnosis and Management**

Session Moderators - *Luigi Giannelli, Mark Potse*

ECG parameters in the characterization of patients at risk of AF - *Adrian Baranchuk*

Imaging techniques for the identification of atrial cardiomyopathy: Role of atrial strain - *Maria Francesca Di Santo, Stefania Paolillo*

Identifying predictors for AF recurrence and ablation success - *Raffaele Salerno*

Discussion

10:30-11:00 | **Coffee Break**

11:00-12:00 | **AF Substrate Characterization: Integrating Electroanatomic Mapping and Imaging Techniques**

Session Moderators - *Davide Morciano, Peter Van Dam*

Advanced electroanatomical Mapping for Substrate Characterization - *Raffaele Salerno*

Merging EAM with cardiac imaging to improve anatomical accuracy - *Francesco Viola*

Integrating ECG and Echo in predicting stroke and morbidity in atrial fibrillation - *Mori Krantz*

Discussion

12:00-13:00 | **AF Genetics & Biomarkers**

Session Moderators - *Sara Benedetti, Alessia Vuturo, Elena Zaklyazminskaya*

Decoding the Genetic Substrates of Atrial Fibrillation
Elena Zaklyazminskaya

Protein layers of Atrial fibrillation: Biomarker risk panel findings in PAMP-FA - *Marco Piccoli*

Genetic layers of Atrial fibrillation: Genetic risk panel findings in PAMP-FA - *Monica Franzese*

Discussion

13:00-14:00 | **Lunch**

14:00-15:00

How to Stratify the Risk of Atrial Fibrillation and Stroke

Session Moderators - *Iwona Cygankiewicz, Jennifer Streeter*

Emerging Biomarkers Linking Atrial Fibrillation to the Risk of Stroke - *Jennifer Streeter*

Wearable vs implantable devices for AF detection: How to choose - *Constantinos Bakogiannis*



Device-detected and wearable-detected AF, and implications for adverse outcome risks - *Linda Johnson*

Discussion

15:00-16:00

Hypertrophic Cardiomyopathy and Left Ventricular Hypertrophy

Session Moderators - *Franco Cecchi, Roberto Rondine*



QRS complex patterns in LVH and obesity: Markers of electrical remodeling of myocardium - *Ljuba Bacharova*

ECG in HCM: from genotypes to phenotypes, risk stratification and therapy - *Franco Cecchi*



Role of ECG in the differential diagnosis of diseases with hypertrophic phenotypes - *Paolo Compagnucci*

Discussion

16:00-16:30

Plenary Session

Session Moderators - *Emanuela T. Locati, Manlio Marquez*



The future of electrophysiology in the era of AI - *Vassilis Vassilikos*

Panel Discussion

Session Moderators - *Constantinos Bakogiannis, Laura Burattini, Edward Grant, Malgorzata Kurpesa, Mori Krants, Iwona Cygankiewicz*

16:30-17:00

ISE ISHNE YIA

Award Ceremony + Closing Ceremony

09:30-10:30

e-health and AI in Wearable and Portable Devices

Session Moderators - *Laura Burattini, Edward Grant*

New view of heart rate variability in the era of wearable devices - *Costantinos Bakogiannis*



Role of AI in interpretation of ECG tracings by wearable and portable devices - *Gary Tze*

Comparison of rule-based versus AI algorithms for atrial fibrillation detection in Holter recordings - *Fabio Badilini*

Discussion

10:30-11:00

Coffee Break

11:00-12:00

From AF Diagnosis to Risk Stratification

Session Moderators - *Alessandro Fuga, Malgorzata Kurpesa*

Machine learning prediction of outcome following atrial fibrillation ablation - *Raffaele De Lucia*



Atrial fibrillation and brain: How to stratify and manage the thromboembolic risk - *Lin Yee Chen*



Atrial fibrillation in athletes: Diagnosis, prevention and management - *Luigi Sciarra*

Discussion

12:00-13:00

ISE ISHNE Abstract Session

Session Moderators - *Parvin Dorostkar, Pyotr Platonov*

A reassessment of the ECG criteria for discrimination between ventricular tachycardia and supraventricular tachycardia with aberrant conduction - *D. T. Connelly*

The "Hypertrophy-Ischemia-Arrhythmia" Triad in Hypertensive Electrocardiography - *L. Nie*



Age-Dependent Performance of Adult-Trained AI Algorithms for Automatic Analysis of Pediatric Holter ECG Recordings - *R. Samborski*

Cognitive function and working memory assessment - *K. Triantafyllou*

Discussion

13:00-14:00

Lunch - ISHNE General Assembly

14:00-15:00

Neurocardiology and Syncope

Session Moderators - *Serenella Castelveccchio, Branislav Milovanovic*



Role of ECG in arrhythmic risk stratification in neuromuscular diseases - *Thomas Kligenheben*

Evaluation of SNS activity in syncope, orthostatic hypotension and POT - *Branislav Milovanovic*

Magnetic Resonance Imaging in Non-MRI-Conditional Cardiac Implantable Electronic Devices - *Bulent Gorenek*

Discussion

15:00-16:00

ECG Masterclass

Faculty: *Adrian Baranchuk, Jennifer Streeter, Antonio Zaza, Giuseppe Bagliani*

Not all ST elevations are ischemia: Detecting new markers of arrhythmogenesis

Differential Diagnosis of Wide complex tachycardia: Supraventricular vs. Ventricular Tachycardia

Discussion

FACULTY

Luigi Anastasia

*IRCCS Policlinico
San Donato, Milano – Italy*

Ljuba Bacharova

*International Laser Center CVTI,
Bratislava – Slovakia*

Fabio Badilini

*University of California,
San Francisco, CA – USA*

Giuseppe Bagliani

*Università Politecnica delle Marche,
Ancona – Italy*

Constantinos Bakogiannis

*MD PhD – 3rd Cardiology Department, Aristotle
University of Thessaloniki – Greece*

Adrian Baranchuk

*Universidad Abierta Interamericana,
Buenos Aires – Argentina*

Sara Benedetti

*IRCCS Policlinico San Donato,
Milano – Italy*

Yochai Birnbaum

*Baylor College of Medicine,
Houston, TX – USA*

Antonio Boccellino

*IRCCS Policlinico San Donato,
Milano – Italy*

Laura Burattini

*Università Politecnica delle Marche,
Ancora – Italy*

Enrico Caiani

*Politecnico,
Milano – Italy*

Serenella Castelvechio

*IRCCS Policlinico San Donato,
Milano – Italy*

Franco Cecchi

*SYNLAB degli Studi di Firenze
Italy*

Lin Yee Chen

*University of Minnesota Medical School
USA*

Giuseppe Ciconte

*IRCCS Policlinico San Donato,
Milano – Italy*

Paolo Compagnucci

*University Hospital Riuniti of Ancona
Italy*

Derek Connolly

*University of Glasgow
United Kingdom*

Daniel Cortez

*UC Davis Children's Hospital,
Sacramento, CA – USA*

Cinzia Crescenzi

*Policlinico Casilino,
Rome – Italy*

Iwona Cygankiewicz

*Medical University of Lodz
Poland*

Luigi De Ambroggi

*University of Milano
Italy*

Raffaele De Lucia

*Pisa University Hospital
Italy*

Maria Francesca Di Santo

*University of Naples Federico II,
Napoli – Italy*

Polychronis Dilaveris

*Hippokraton General Hospital, Athens
Greece*

Parvin Dorostkar

*University of Minnesota Medical Center, Fairview,
MN – USA*

Monica Franzese

*SYNLAB IRCCS SDN,
Napoli – Italy*

FACULTY

Alessandro Fuga

*IRCCS Policlinico San Donato,
Milano – Italy*

Luca Giannelli

*IRCCS Policlinico San Donato,
Milano – Italy*

Bulent Gorenek

*Eskisehir Osmangazi University
Turkey*

Edward Grant

*The University of British Columbia,
Vancouver, BC – Canada*

Krzysztof Kaczmarek

*Medical University of Lodz
Poland*

Thomas Kligenheben

*Praxis für Kardiologie,
Bonn – Germany*

Mori Krantz

*University of Colorado Health Sciences Center,
Denver, CO – USA*

Malgorzata Kurpesa

*Medical University of Lodz.
Poland*

Antonio Izzo

*IRCCS Policlinico San Donato,
Milano – Italy*

Peter Macfarlane

*University of Glasgow,
United Kingdom*

Manlio Marquez

*Instituto Nacional de Cardiología “Ignacio
Chavez”,
Ciudad de Mexico – Mexico*

Lorenzo Menicanti

*Policlinico San Donato,
Milano – Italy*

Axel Loewe

*Karlsruhe Institute of Technology,
Germany*

Carolina Lombardi

*IRCCS Istituto Auxologico Italiano
Ospedale San Luca,
Milano – Italy*

Maurizio Lunati

*Azienda Ospedaliera Ospedale Niguarda
Ca' Granda,
Milano – Italy*

Branislav Milovanovic

*University of Belgrade.
Serbia*

Davide Morciano

*IRCCS Ospedale San Raffaele,
Milano – Italy*

Gabriele Negro

*IRCCS Policlinico San Donato,
Milano – Italy*

Michele Oppizzi

*IRCCS Policlinico San Donato,
Milano – Italy*

Marco Pancotti

*MPX Lab,
Lugano – Switzerland*

Stefania Paolillo

*University of Naples Federico II,
Napoli – Italy*

Sara Paratico

*IRCCS Policlinico San Donato,
Milano – Italy*

Marco Piccoli

*IRCCS Policlinico San Donato,
Milano – Italy*

Ewa Piotrowicz

*National Institute of Cardiology,
Warsaw – Poland*

FACULTY

Mark Potse

*Université de Bordeaux,
France*

Pyotr Platonov

*Lund University
Sweden*

Antonio Ribeiro

*University Hospital of the Federal University
of Minas Gerais,
Belo Horizonte – Brazil*

Ilaria Rivolta

*Milano-Bicocca University,
Italy*

Massimo Rivolta

*Università degli Studi,
Milano – Italy*

Roberto Rondine

*IRCCS Policlinico San Donato,
Milano – Italy*

Andrea Saglietto

*“Città della Salute e della Scienza” Hospital,
Torino – Italy*

Raffaele Salerno

*IRCCS Policlinico San Donato,
Milano – Italy*

Luigi Sciarra

*Università dell'Aquila,
Italy*

Pietro Spagnolo

*IRCCS Policlinico San Donato,
Milano – Italy*

Gary Tze

*Tianjin Medical University,
Hong Kong*

Jennifer Streeter

*The University of Iowa,
Iowa City – USA*

Peter van Dam

*Jagiellonian University Medical College, Krakow –
Poland*

Vassilis Vassilikos

*Aristotle University of Thessaloniki,
Greece*

Gabriele Vignati

*Azienda Ospedaliera Ospedale Niguarda
Ca' Granda,
Milano – Italy*

Francesco Viola

*Gran Sasso Science Institute (GSSI),
L'Aquila – Italy*

Alessia Vuturo

*IRCCS Policlinico San Donato,
Milano – Italy*

Elena Zaklyazminskaya

*Petrovsky Russian Research Centre of Surgery 2,
Moscow – Russia*

Wojciech Zareba

*University of Rochester Medical Center,
NY – USA*

Antonio Zaza

*Milano-Bicocca University,
Italy*

Gabriele Zanutto

*Ospedale Magalini,
Villafranca di Verona – Italy*

GENERAL INFORMATION

IN PRESENCE VENUE

Policlinico San Donato

*Piazza E. Malan 2
San Donato Milanese (Mi) Italy*



**Funded by
the European Union**

NextGenerationEU

*Funded by the European Union - NextGenerationEU - PNRR M6C2 - Investment 2.1
Enhancing and strengthening biomedical research within the Italian National Health Service*

*Project code PNRR-MCNT2-2023-12378472
CUP code E53C24000850001*
