Saturday June 24th, 2017, 08:30

Collaborative Life Sciences Building

Clinical ECG Fundamentals

Room: Rm. 1 - 3A003A

Chair(s): Charles Henrikson, MD MPH (USA) and Zachary D. Goldberger MD MS (USA)

Length (minutes)	
15	Peter Jessel, MD
	Oregon Health & Science University, United States of America
	Is my patient in a life-threatening arrhythmia? Differential diagnosis of ventricular
	and supraventricular arrhythmia on 12-lead ECG
15	Thomas Dewland, MD
	Oregon Health & Science University, United States of America
	Mechanistic diagnosis of atypical atrial flutter from the ECG
15	Samuel Sclarovsky, MD
	Tel Aviv University Sackler Faculty of Medicine, Israel
	ECG in the physiological and pathological hypertrophic remodeling
15	Miquel Fiol, MD PhD
	Hospital Universitario Virgen del Rocío, Spain
	ECG in Emergency patients with chest pain
15	Charles Henrikson, MD MPH
	Oregon Health & Science University, United States of America
	AV block after TAVR: can we predict it and prevent complications?
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Saturday June 24th, 2017, 08:30

Collaborative Life Sciences Building

Young Investigator Rapid Fire Abstracts

Room: Rm. 2 - 3A003B

Chair(s): Larisa Tereshchenko, MD PhD (USA) and Peter MacFarlane, DSc FRCP (UK)

Length (minutes)	
5 + 3 Q&A	Daniel Cortez, MD (USA)
	Derived-VCG and cardiac catheterization predictors of atrial arrhythmias in
	patients with the Fontan palliation
5 + 3 Q&A	Bryce Alexander, BSc (Canada)
	Coronary artery disease and interatrial block: implications for new-onset atrial fibrillation
5 + 3 Q&A	Erica Clarke Whalen, MBBS (Canada)
	Gender equity imbalance in electrocardiology: A call to action
5 + 3 Q&A	Muammar Kabir, PhD presented by Erick Andres Perez Alday, PhD (USA)
	Optimal configuration of adhesive ECG patches for long term vectorcardiogram monitoring
5 + 3 Q&A	Akitoshi Chikamoto, undergraduate student (Japan)
	The characterization of autonomic nervous function in Senescence Accelerated
	Mouse-Prone 8 (SAMP8)
5 + 3 Q&A	Erick Andres Perez Alday, PhD (USA)
	New method to digitize electrocardiograms printed in multiple formats
5 + 3 Q&A	Charlotte Stephansen, MD-PhD student (Denmark)
	Interventricular delay in cardiac resynchronization therapy: Inter observer
	agreement when aiming for the narrowest paced QRS complex
5 + 3 Q&A	Harley Stevenson-Cocks, BSc (United Kingdom)
	A novel model of rat ventricular electrophysiology reveals mechanisms of
	spontaneous Ca2+ release in heart failure
5 + 3 Q&A	Jaume Coll-Font, PhD (USA)
	Tracking the heart movement with the ECG; Correcting the respiration
	movement of the heart in a porcine model
5 + 3 Q&A	Mehak Idrees, MD (USA)
	Sex-Specific differences in QRS characteristics of LBBB in heart failure patients undergoing cardiac resynchronization therapy

Saturday June 24th, 2017, 10:30

Collaborative Life Sciences Building

Sudden cardiac death and ECG screening in athletes

Room: Rm. 1 - 3A003A

Chair(s): Jordan Prutkin, MD MHS (USA) and Chuck Swerdlow, MD (USA)

Length (minutes)	
15	Eric Stecker, MD MPH
	Oregon Health & Science University, United States of America
	Epidemiology of sudden cardiac death in community and in athletes
15	Jordan Prutkin, MD MHS
	University of Washington, United States of America
	International criteria for electrocardiographic interpretation in athletes
15	Ronn Tanel, MD
	University of San Francisco California, United States of America
	Asymptomatic WPW in young athletes
15	Seshadri Balaji, MD
	Oregon Health & Science University, United States of America
	Risk stratification for sudden death in children and adolescents with HCM. What
	do we know? What do we need to know?
15	Chuck Swerdlow, MD
	University of California Los Angeles, United States of America
	ICD in athletes: how to achieve the best clinical outcomes and avoid
	complications
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Saturday June 24th, 2017, 10:30

Collaborative Life Sciences Building

Young Investigator Rapid Fire Abstracts

Room: Rm. 2 - 3A003B

Chair(s): Larisa Tereshchenko, MD PhD (USA) and Peter MacFarlane, DSc FRCP (UK)

Length (minutes)	
5 + 3 Q&A	Aron Bender, MD (USA)
	Ventricular pre-excitation on ECG is independently associated with incident
	atrial fibrillation in a prospective community cohort study
5 + 3 Q&A	Shulun Zang, MD (USA)
	Temporal dispersion of repolarization are associated with defibrillator therapies
	for ventricular arrhythmias
5 + 3 Q&A	Audrey Uy-Evanado, MD (USA)
	Aggressive blood glycemic control among diabetics and risk of sudden cardiac death
5 + 3 Q&A	Noelle Garster (presented by Charles Henrikson, MD MPH (USA))
	Bedside identification of patients at risk for PVC-induced cardiomyopathy: Is
	ECG useful?
5 + 3 Q&A	Carmen Rusinaru, MD PhD (USA)
	A novel non-Invasive sex- specific risk marker for sudden cardiac death with preserved ejection fraction
5 + 3 Q&A	Rolf Oberholzer (presented by Roger Abächerli, PhD (Switzerland)
	Reconstruction of the ECG from the VCG is posture dependent
5 + 3 Q&A	Chetan Lokhande, MD (USA)
	"Ideally" placed left ventricular leads for CRT yield different paced EKG findings
	in patients with left bundle branch block: Anatomical vs electrical optimization
5 + 3 Q&A	Chetan Lokhande, MD (USA)
	How Effectively does application of strict ("Strauss") criteria for LBBB diagnosis
	exclude patients with increased LV mass?
5 + 3 Q&A	Petros Arsenos, MD PhD (Greece)
	Programmed ventricular stimulation predicts sudden cardiac death in heart
	failure patients with preserved ejection fraction
5 + 3 Q&A	Petros Arsenos, MD PhD (Greece)
	Increased prevalence of late potentials on signal-averaged electrocardiogram in
	psychiatric patients

Collaborative Life Sciences Building

Debate: I shall only consider CRT for HF patients with Classic LBBB

Room: Rm. 1 - 3A003A

Referee: Chuck Swerdlow, MD (USA)

Length (minutes)

45 **Wojciech Zareba, MD PhD** (pro)

University of Rochester, United States of America

vs.

Niraj Varma MD PhD (con)

Cleveland Clinic, United States of America

Saturday June 24th, 2017, 13:00

Collaborative Life Sciences Building

Clinical ECG Cases Review

Room: Rm. 2 - 3A003B

Chair(s): Zachary Goldberger, MD MS (USA)

Panel: Charles Henrikson MD MPH (USA), Eric Stecker MD MPH (USA), Chuck Swerdlow, MD (USA), Jordan Prutkin, Seshadri Balaji MD (USA), Samuel Sclarovsky, MD (Israel)

Length (minutes)	
7 + 3 Q&A*	Tuan Mai, MD (USA)
	Macroreentrant Atrial Flutter Circuits Involving Native and Donor Atria after
	Bilateral Lung Transplant
7 + 3 Q&A*	Angela Krebsbach PA-C, MS (USA)
	Inappropriate Ventricular Pacing in an Newly Transplanted Heart with Normal AV
	Conduction
7 + 3 Q&A*	Sanoj Chacko (Canada)
	CRT-AutoCapture Induced Ventricular Arrhythmia
7 + 3 Q&A*	Sanoj Chacko (Canada)
	Wenckebach Periods of Alternate Beats: An Unusual Phenomenon
5	Buffer time

^{*}subject to panel discretion

Saturday June 24th, 2017, 14:00

Collaborative Life Sciences Building

ECG monitoring and big data

Room: Rm. 1 - 3A003A

Chair(s): Iwona Cygankiewicz, MD PhD (Poland) and Jonathan Steinberg, MD (USA)

Length (minutes)	
15	Iwona Cygankiewicz, MD PhD
	Medical University of Łódź, Poland
	Clinical indications for AECG monitoring - ISHNE/HRS consensus
15	Suave Lobodzinski, PhD
	University of California Los Angeles, United States of America
	Is Holter Obsolete? State -of-the-art ambulatory ECG long-term monitoring in the
	21st century
15	Emanuela Teresa Locati, MD PhD
	Milano, Italy
	Long-term ECG monitoring in unexplained syncope and palpitations: SYNARR-
	Flash study and beyond
15	Jonathan Steinberg, MD
	Summit Medical Group, United States of America
	The battle for long-term ECG monitoring supremacy: smartphone ECG versus
	implantable loop recorder
15	Ken Stein, MD
	Boston Scientific, United States of America
	Promises and pitfalls of big data
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Saturday June 24th, 2017, 14:00

Collaborative Life Sciences Building

How to record ECG

Room: Rm. 2 - 3A003B

Chair(s): Barbara Drew, RN PhD (USA), and Paul Kligfield, MD (USA)

Length (minutes)	
15	Paul Kligfield, MD
	Weill Cornell Medical College, United States of America
	Errors in ECG acquisition: precordial electrode placement and lead wire switches
15	Roger Abächerli, PhD
	SCHILLER AG, Baar, & Cardiovascular Research Institute Basel, Switzerland
	The estimated ECG angles derived by VCG significantly differ when electrode
	positions and body build are included into the vector calculation model
15	Nora Goldschlager, MD
	University of California San Francisco, United States of America
	Artifacts that affect interpretation of the ECG
15	Barbara Drew, RN PhD
	University of California San Francisco, United States of America
	Causes of false alarms with in-patient monitoring
15	Peter MacFarlane, DSc FRCP
	University of Glasgow, United Kingdom
	Assessment of Bandwidth for Pediatric ECGs
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Saturday June 24th, 2017, 15:45

Collaborative Life Sciences Building

Welcome Remarks and ISHNE Keynote

Room: Combined

Length (minutes)

15 Welcome Remarks

Larisa Tereshchenko, MD PhD

Oregon Health & Science University, United States of America

Sanjiv Kaul, MD

Oregon Health & Science University, United States of America

Wojciech Zareba, MD PhD

University of Rochester, United States of America

Jonathan Steinberg

Summit Medical Group, United States of America

55 **ISHNE Keynote**

Niraj Varma MD PhD

Cleveland Clinic, United States of America

Remote monitoring of Cardiac Implantable Electronic Devices: from Curiosity to

Class 1 Recommendation

Saturday June 24th, 2017, 17:00

Collaborative Life Sciences Building

Mechanisms, ECG manifestation, and risk stratification

Room: Rm. 1 - 3A003A

Chair(s): Lin Yee Chen, MD MS (USA), and Mark Niebauer, MD PhD (USA), Przemyslaw Guzik, MD PhD (Poland)

Length (minutes)	
15	Ignatius G Zarraga, MD
	Oregon Health & Science University, United States of America
	Just how helpful is the ECG in the congenital long QT syndrome?
15	Takanori Ikeda, MD
	University of Tokyo, Japan
	Risk stratification using noninvasive techniques in Brugada syndrome
15	Mark Niebauer, MD PhD
	Cleveland Clinic, United States of America
	QRS frequency analysis in bundle branch block: clinical outcomes and CRT
	response
15	Marek Malik, MD
	Imperial College London, United Kingdom
	QRS microfractionations in ICD recipients
8	Erick Andres Perez Alday, PhD
	Oregon Health & Science University, United States of America
	Anisotropy of ventricular conduction is more prominent during ventricular
	tachycardia, as compared to sinus rhythm
8	Wilson Good, BSc, PhD Student
	University of Utah, United States of America
	Detecting Ischemic Stress Using Laplacian Eigenmaps
14	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Saturday June 24th, 2017, 17:00

Collaborative Life Sciences Building

How to teach clinical ECG

Room: Rm. 2 - 3A003B

Chair(s): Adrian Baranchuk, MD (Canada) and Victor Froelicher, MD (USA)

Length (minutes)	
15	Adrian Baranchuk, MD
	Queen's University, Canada
	How and what to teach EP Fellows about Electrocardiology
45	Joshua Landy, MD
	Co-Founder Figure 1, Canada
	Online ECG Education: The experience of Figure 1
15	Zachary Goldberger, MD MS
	University of Washington, United States of America
	Roundtable discussion
15	Antonio Bayés de Luna, MD
	Hospital Quirónsalud Barcelona, Spain
	Roundtable discussion

6. 30 pm Reception at CLSB for all

Collaborative Life Sciences Building

Interatrial Block and Bayés' Syndrome: New paradigm in the prediction of AF, Stroke and Cognitive Impairment?

Room: Rm. 1 - 3A003A

Chair(s): Antonio Bayés de Luna, MD (Spain) and Adrian Baranchuk, MD (Canada)

Length (minutes)	
15	Antonio Bayés de Luna, MD
	Hospital Quirónsalud Barcelona, Spain
	Interatrial block: from the surface ECG to the Cardiac Magnetic Resonance
15	Pyotr Platonov, MD
	Lund University, Sweden
	A comprehensive anatomical review of the Bachmann bundle and adjacent structures
15	Larisa Tereshchenko, MD PhD
	Oregon Health & Science University, United States of America
	Interatrial block and Deep Terminal Negativity of P-wave in V1: Friend or foe?
15	Lin Yee Chen, MD MS
	University of Minnesota, United States of America
	P wave indices and their predictive ability for stroke in AF
15	Adrian Baranchuk, MD
	Queen's University, Canada
	Interatrial block and atrial fibrillation- the Bayés Syndrome: Are we ready for "prime time?"
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Collaborative Life Sciences Building

How to code ECG

Room: Rm. 2 - 3A003B

Chair(s): JP Couderc, PhD MBA (USA) and Roger Abächerli, PhD (Switzerland)

15 Kjell Nikus, MD PhD Tampere University Hospital, Finland Challenges with the definition of the Q wave, the J point and the T wave 15 Marek Malik, MD Imperial College London, United Kingdom T-peak: what does it mean and how to identify it? 15 JP Couderc, PhD MBA University of Rochester, United States of America Improving Reproducibility, Increasing Standards of ECG analyses, and sharing the data: THEW ECG Warehouse experience 15 Fabio Badilini, PhD
Challenges with the definition of the Q wave, the J point and the T wave Marek Malik, MD Imperial College London, United Kingdom T-peak: what does it mean and how to identify it? JP Couderc, PhD MBA University of Rochester, United States of America Improving Reproducibility, Increasing Standards of ECG analyses, and sharing the data: THEW ECG Warehouse experience
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Improving Reproducibility, Increasing Standards of ECG analyses, and sharing the data: THEW ECG Warehouse experience
data: THEW ECG Warehouse experience
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15 Fahio Badilini, PhD
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AMPS-LLC, United States of America
New techniques for long-preserving storage and analysis of digital ECGs
15 Roger Abächerli, PhD
SCHILLER AG, Baar, & Cardiovascular Research Institute Basel, Switzerland
ECG measurement changes due to the first-order high-pass filter
15 Panel Discussion
All questions saved for panel discussion for all speakers to address as a group

Collaborative Life Sciences Building

Pierre Rijlant Lecture

Room: Combined

Length (minutes)

60 Victor Froelicher, MD

Stanford University, United States of America Perspectives on the Future of Electrocardiography

Collaborative Life Sciences Building

ISHNE general assembly

Room: Combined

Length (minutes)

30 **Jonathan Steinberg, MD**

Summit Medical Group, United States of America

Collaborative Life Sciences Building

Debate: Early repolarization pattern – is it over hyped?

Referee: Victor Froelicher, MD (USA)

Room: Rm. 1 - 3A003A

Length (minutes)

45 **Peter MacFarlane, DSc FRCP** (pro)

University of Glasgow, United Kingdom

Vs.

Sami Viskin, MD (con)

Tel-Aviv Medical Center, Israel

Collaborative Life Sciences Building

Clinical ECG cases review panel

Room: Rm. 2 - 3A003B

Chair(s): Kjell Nikus

Panel: Takanori Ikeda, MD (Japan), Andrés Ricardo Pérez-Riera, MD PhD (Brazil), Pyotr Platonov, MD (Sweden), Yochai Birnbaum, MD (USA)

Length (minutes)	
7 + 3 Q&A*	Carlos Alberto Pastore, MD PhD (Brazil)
	Brugada pattern with and without right bundle-branch block: how can VCG
	differentiate them
7 + 3 Q&A*	Michał Kałowski, MD (Poland)
	ECG paper with traces of soot – Abnormalities in the recording of the victim of
	carbon monoxide poisoning
7 + 3 Q&A*	Michał Kałowski, MD (Poland)
	Misdiagnosis of pacemaker dysfunction due to impaired intraatrial conduction
	caused by severe fibrosis of atria in patient with scleromyositis
7 + 3 Q&A*	Paulina Przyżycka (presented by Michał Kałowski, MD (Poland))
	Third time lucky – Don't let the patient die for the fourth time
5	Buffer time

^{*}subject to panel discretion

Collaborative Life Sciences Building

From genetics to genomics of ECG phenotypes to cardiac modeling

Room: Rm. 1 - 3A003A

Chair(s): Larisa Tereshchenko, MD PhD (USA) and Sami Viskin, MD (Israel)

Length (minutes)	
20	Nona Sotoodehnia, MD MPH
	University of Washington, United States of America
	Genomics of Cardiac Electrical Activity
20	Sami Viskin, MD
	Tel-Aviv Medical Center, Israel
	Proarrhythmic Effects of Cardiac Memory
20	Remi Dubois, PhD
	ESPCI, France
	Ventricular fibrillation: what we can learn from noninvasive mapping
20	Hector Barajas-Martinez, PhD
	Masonic Medical Research Laboratory, United States of America
	Genetics in Sudden Cardiac Death Syndromes
10	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Collaborative Life Sciences Building

Young Investigators Competition Finalists

Room: Rm. 2 - 3A003B

Chair(s): Peter MacFarlane, DSc FRCP (UK), Rob MacLeod, PhD (USA), Jonathan Steinberg, MD (USA), Wojciech Zareba, MD PhD (USA)

Length (minutes)	
10 + 5 Q&A	Farhad Pashakhanloo, PhD (USA)
	Influence of myofiber architecture on the anisotropic wave propagation and
	electrogram waveforms using image based computer models of human atria
10 + 5 Q&A	Golriz Sedaghat, BSc, Masters Student (USA)
	Continuous activation through the entire cardiac cycle discriminates reentrant vs.
	focal ventricular tachycardia on surface ECG
10 + 5 Q&A	Erick Andres Perez Alday, PhD (USA)
	Novel non-invasive algorithm to identify atria reentry and ectopic foci origins
	from a multi system array. A computational study
10 + 5 Q&A	Jason Thomas, BSc (USA)
	Global electrical heterogeneity in young athletes
10 + 5 Q&A	Kensuke Sakata, MD (Japan)
	Not all non-paroxysmal atrial fibrillation drivers are included in complex
	fractionated electrogram area or low voltage area: ExTRa mapping project
10 + 5 Q&A	Joseph Allencherril, MD (USA)
	Q waves in V1-V3 do not represent strict basal anteroseptal infarcts: late
	gadolinium enhancement cardiovascular magnetic resonance imaging
	correlations

Collaborative Life Sciences Building

Innovative technologies in electrophysiology of the 21st century

Room: Rm. 1 - 3A003A

Chair(s): Sami Viskin, MD (Israel) and Larisa Tereshchenko, MD PhD (USA)

Length (minutes)

20 + 5 Q&A Charles Swerdlow, MD

University of California Los Angeles, United States of America

Innovations in Clinical Electrophysiology

20 + 5 Q&A Leslie Tung, PhD

Johns Hopkins, United States of America

Electrophysiology of Engineered Cardiac Tissues Using Human Induced

Pluripotent Stem Cells

Collaborative Life Sciences Building

In memoriam Mike Laks and Galen Wagner Lectures

Chairs: Peter MacFarlane, DSc FRCP (UK), Wojciech Zareba, MD PhD (USA)

Room: Rm. 2 - 3A003B

Length (minutes)

20 + 5 Q&A Suave Lobodzinski, PhD

University of California Los Angeles, United States of America

History of a God's signal discoveries

20 + 5 Q&A Yochai Birnbaum, MD

Baylor College of Medicine, United States of America

Prediction of right atrial volume index by electrocardiography: ECG-echocardiography correlations in patients with pulmonary hypertension

Collaborative Life Sciences Building

Ventricular conduction abnormalities and left ventricular dyssynchrony

Room: Rm. 1 - 3A003A

Chair(s): Van Oosterom, PhD (Netherlands) and Sami Viskin, MD (Israel)

Length (minutes)	
15	Ljuba Bacharova, MD, DSc, MBA
	International Laser Centre, Slovakia
	Intraventricular conduction abnormalities - a link between arrhythmias and QRS
	complex patterns
15	Van Oosterom, PhD
	Radboud University Nijmegen, The Netherlands
	How simulation of RBBB and LBBB is implemented in ECGSIM
15	Laura Bear, PhD
	The Electrophysiology and Heart Modeling Institute (LIRYC), France
	Detection of Electrical Dyssynchrony by Electrocardiographic Imaging
15	Junaid Zaman, MD PhD presented by (Chuck Swerdlow, MD, UCLA)
	Imperial College London, United Kingdom and Stanford University, USA
	Electrical Characteristics of Defibrillation Lead Dislodgement to the Atrium
15	Al Benson BSc, PhD
	University of Leeds, United Kingdom
	hERG Channel Activators and Vulnerability to Re-entrant Arrhythmias: A
	Computational Study of the Roles of Potassium and Sodium Currents
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Collaborative Life Sciences Building

ECG imaging of arrhythmias and ischemia

Room: Rm. 2 - 3A003B

Chair(s): Rob MacLeod, PhD (USA) and Dana Brooks, PhD (USA)

Length (minutes)	
15	Dana Brooks, PhD
	Northeastern University, United States of America
	Technical challenges to wider clinical adoption of ECGI
15	Michał Kania, PhD
	The Electrophysiology and Heart Modeling Institute (LIRYC), France
	Evaluation of a new method for three-dimensional prediction of the exit site of
	ventricular tachycardia
15	Peter van Dam, PhD
	Peacs BC, Netherlands
	The path of the mean spatio-temporal activation isochrone derived from the 12
	Lead-ECG to localize the PVC origin
15	Milan Tyšler, PhD
	Slovak Academy of Sciences, Slovakia
	Evaluation of using reduced number of mapping leads for noninvasive localization
	of ectopic ventricular activity
15	Brett Burton, BSc, PhD student
	University of Utah, United States of America
	The effect of subject-specific ischemic zone geometries on body surface
	potentials
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Monday June 26th, 2017, 08:30

Portland Art Museum

Autonomic nervous system and arrhythmogenesis

Room: Rm. 1 - Kridel Grand Ballroom

Chair(s): Leslie Tung, PhD (USA) and Peng-Sheng Chen, MD (USA)

Length (minutes)	
15	Beth Habecker, PhD
	Oregon Health & Science University, United States of America
	Cardiac Autonomic Nervous System fundamentals
15	Peng-Sheng Chen, MD
	University of Indiana, United States of America
	Recording of skin sympathetic nerve activity on ECG
15	Marek Malik, MD
	Imperial College London, United Kingdom
	Heart rate variability - what does it mean and what we measure?
15	Georg Schmidt, MD
	Technische Universität München, Germany
	Baroreflex sensitivity assessment using heart rate turbulence
15	Larisa Tereshchenko, MD PhD
	Oregon Health & Science University, United States of America
	Can ECG assess sympathetic nerves density in the ventricles?
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Monday June 26th, 2017, 08:30

Portland Art Museum

Acute ischemia, myocardial injury, and an old scar

Room: Rm. 2 - Fields Sunken Ballroom

Chair(s): Samuel Sclarovsky, MD (Israel) and Miquel Fiol, MD (Spain)

Length (minutes)	
15	Miquel Fiol, MD
	Hospital Universitario Virgen del Rocío, Spain
	Where is the culprit artery in patients with ACS
15	Petros Arsenos, MD PhD
	Hippokration Hospital, Greece
	Primary prevention of sudden cardiac death in post-myocardial infarction Patients
	with preserved ejection fraction: PRESERVE-EF Study
15	Cees A. Swenne, PhD
	Leiden University Medical Center, The Netherlands
	Subtraction electrocardiography to improve myocardial ischemia detection
15	Rob Macleod, PhD
	University of Utah, United States of America
	Myocardial ischemia and its ECG Signature: 100 years of Forgery?
15	lan Azarov, MD
	Institute of Physiology/Komi Science Center, Russia
	Activation Delay in midmyocardium under experimental coronary occlusion in
	pigs is associated with j-wave development on body surface ECG
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Monday June 26th, 2017, 11:00

Portland Art Museum

Mark Josephson lecture

Room: Rm. 1 - Kridel Grand Ballroom

Length (minutes)

55 Kalyanam Shivkumar, MD

University of California Los Angeles, United States of America

Autonomic nervous system and ventricular arrhythmias: mechanisms and

therapeutic opportunities

Monday June 26th, 2017, 11:55

Portland Art Museum

ISE General Assembly

Room: Rm. 1 - Kridel Grand Ballroom

Length (minutes)

30 Wojciech Zareba, MD PhD

University of Rochester, United States of America

Monday June 26th, 2017, 13:30

Portland Art Museum

Debate: ECG should be used for SCD risk stratification

Room: Rm. 1 - Kridel Grand Ballroom

Referee(s): Peng-Sheng Chen, MD (USA)

Length (minutes)

45 Larisa Tereshchenko, MD PhD (pro)

Oregon Health & Science University, United States of America

It is all about the electrical signature of the arrhythmia

Vs.

Jeffrey Goldberger, MD MBA (con)

University of Miami, United States of America Imaging is paramount. We don't need an ECG

Monday June 26th, 2017, 13:30

Portland Art Museum

Clinical ECG cases review: roundtable discussion

Room: Rm. 2 - Fields Sunken Ballroom

Chair(s): Adrian Baranchuk, MD (Canada)

Panel: Antonio Bayés de Luna, MD (Spain), Victor Froelicher, MD (USA), Carlos Pastore

Length (minutes)	
7 + 3 Q&A*	Nelson Samesima, MD PhD (Brazil)
	Brugada syndrome ablation: What the Vectorcardiogram can tell us?
7 + 3 Q&A*	Brooks Walsh, MD (USA)
	Giant R Waves in Hyperacute Myocardial Infarction: Hyperkalemia Mimic?
7 + 3 Q&A*	Brooks Walsh MD (USA)
	Hyperventilation-Provoked STE and TWI in a Young Afro-Caribbean Adult Woman
7 + 3 Q&A*	Brooks Walsh MD (USA)
	Subacute Occlusion of the Proximal RCA Producing Anterior Q waves and T Wave
	Inversion
5	Buffer time

^{*}subject to panel discretion

Monday June 26th, 2017, 14:25

Portland Art Museum

Atrial Fibrillation Symposium

Room: Rm. 1 - Kridel Grand Ballroom

Chair(s): Wojciech Zareba, MD PhD (USA), Jeffrey Goldberger, MD MBA (USA)

Length (minutes)	
20	Jeffrey Goldberger, MD MBA
	University of Miami, United States of America
	Atrial Myopathy Underlying Atrial Fibrillation: Arrhythmogenic and Thrombogenic
	Substrate
20	Maria Guillem, PhD
	Universitat Politècnica de València, Spain
	Noninvasive estimation of hierarchical activation patterns during atrial fibrillation
	by Electrocardiographic Imaging
20	Takanori Ikeda, MD
	Toho University, Japan
	Antithrombotic treatment for prevention of stroke due to atrial fibrillation: Real-
	world evidence
20	Wojciech Zareba, MD PhD
	University of Rochester, United States of America
	Effect of Ranolazine on Atrial and Ventricular Arrhythmias
10	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Monday June 26th, 2017, 14:25

Portland Art Museum

Traditional and Novel ECG analyses

Room: Rm. 2 - Fields Sunken Ballroom

Chair(s): Merritt Raitt, Rob Macleod, PhD (USA)

Length (minutes)	
15	Merritt Raitt, MD
	Oregon Health & Science University, United States of America
	Differential diagnosis of supraventricular arrhythmias on 12-lead ECG
15	Heemun Kwok, MD MS
	University of Washington, United States of America
	Method for Rhythm Classification during CPR
15	Marcio Sturmer, MD
	University of Montreal, Canada
	New Criteria Using Initial Activation in V1 and V2 for the Differential Diagnosis of
	Wide Complex Tachycardia
15	Michael A Colman, PhD
	University of Leeds, United Kingdom
	Multi-scale Computational Modeling of Spontaneous Calcium Release Events in
	the Human Atria
15	Takashi Ashihara, MD PhD
	Shiga University of Medical Science, Japan
	ExTRa Mapping-Guided Non-Passively Activated Area Ablation is very Effective for
	Patients with Non-Paroxysmal Atrial Fibrillation
8	Jess Tate, PhD student
	University of Utah, United States of America
	A Sampling Strategy for Reducing Error in ECG Forward Simulation
7	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Tuesday June 27th, 2017, 08:30

Portland Art Museum

Cardiomyopathies

Room: Rm. 1 - Kridel Grand Ballroom

Chair(s): Zachary Goldberger, MD MS (USA), Mark Haigney, MD (USA)

Length (minutes)	
15	Mark Haigney, MD
	Uniformed Services University, United States of America
	Opioid-induced Sudden Death: Diagnostic and prognostic value of ECG and ECG
	monitoring
15	Frank I. Marcus, MD
	University of Arizona, United States of America
	Arrhythmogenic right ventricular dysplasia/cardiomyopathy (ARVD/C): ECG
	diagnostic and prognostic criteria
15	John Madias, MD
	Mount Sinai Medical Center, United States of America
	Can ECG help to diagnose Takotsubo (stress) cardiomyopathy?
15	Antoni Ribeiro, MD PhD
	Federal University of Minas Gerais Belo Horizonte, Brazil
	ECG in Chagas disease: diagnostic and prognostic criteria
15	Petros Arsenos, MD PhD
	Hippokration Hospital, Greece
	Primary prevention of sudden cardiac death in hypertrophic cardiomyopathy:
	prospective cohort study
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Tuesday June 27th, 2017, 08:30

Portland Art Museum

Many faces of cardiac repolarization

Room: Rm. 2 - Fields Sunken Ballroom

Chair(s): Christine Tompkins, MD (USA), Rob MacLeod, PhD (USA)

Length (minutes)	
15	Christine Tompkins, MD
	University of Colorado Denver, United States of America
	Gender differences in ventricular repolarization properties: going beyond the QT
	interval
15	Petros Arsenos, MD PhD
	Hippokration Hospital, Greece
	Non-invasive risk stratification of sudden cardiac death in heart failure:
	comparison of QT interval, T-wave alternans, and deceleration capacity
15	Ramun Schmid (presented by Roger Abächerli, PhD)
	SCHILLER AG, Baar, Switzerland
	ST segment correction formula for AC-coupled Electrocardiogram
15	Ksenia Sedova, PhD
	Czech Technical University in Prague, Czech Republic
	Repolarization Parameters for Predicting Ventricular Tachyarrhythmias in
	Ischemia/Reperfusion Model
15	Michele Pelter, PhD
	University of San Francisco, United States of America
	Evaluation of algorithms designed to detect transient myocardial ischemia in
	patients with acute coronary syndrome
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Tuesday June 27th, 2017, 10:30

Portland Art Museum

Ion channels and channelopathies

Room: Rm. 1 - Kridel Grand Ballroom

Chair(s): Leslie Tung, PhD (USA), Peter Ruben, PhD (Canada)

Length (minutes)	
15	Zachary Goldberger, MD MS
	University of Washington, United States of America
	Channel (opathy) surfing in 2017: Considerations for the clinician
15	Wojciech Zareba, MD PhD
	University of Rochester, United States of America
	Long QT syndrome: diagnosis, prognosis, and treatment
15	Peter Ruben, PhD
	Simon Fraser University, Canada
	Arrhythmogenic triggers in a LQT3/Brugada mixed syndrome sodium channel
	mutant, E1784K
15	Peter Larsson, PhD
	University of Miami, United States of America
	Modified polyunsaturated fatty acids a Long QT Syndrome therapeutics
15	Hector Barajas-Martinez
	Masonic Medical Research Laboratory, United States of America
	Molecular genomics update in short QT syndrome
15	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Tuesday June 27th, 2017, 10:30

Portland Art Museum

Atrial Fibrillation mechanisms and ECG monitoring

Room: Rm. 2 - Fields Sunken Ballroom

Chair(s): Dawood Darbar, MBChB, MD (USA), Marmar Vaseghi, MD (USA)

Length (minutes)	
20	Jonathan Steinberg, MD
	Summit Medical Group, United States of America
	Duration of detected AF and outcomes: does it matter?
20	Larisa Tereshchenko, MD PhD
	Oregon Health & Science University, United States of America
	Network meta-analysis of anti-embolic interventions
20	Dawood Darbar, MBChB, MD
	University of Illinois College of Medicine, United States of America
	Genomics of atrial fibrillation
20	Marmar Vaseghi, MD
	University of California Los Angeles, United States of America
	Cardiac autonomic control and its modulation for prevention and treatment of
	atrial fibrillation
10	Panel Discussion
	All questions saved for panel discussion for all speakers to address as a group

Tuesday June 27th, 2017, 12:00

Portland Art Museum

Closing remarks and awards ceremony

Room: Rm. 1 - Kridel Grand Ballroom

Length (minutes)

30 **Jonathan Steinberg, MD**

Summit Medical Group, United States of America

Wojciech Zareba, MD PhD

University of Rochester, United States of America

Rob Macleod, PhD

University of Utah, United States of America