



Annual meeting of the Working Groups on Myocardial Function and the Working Group on Cellular Biology of the Heart

25-28 May 2017, Villa Monastero, Italy

“The multicellularity of the heart: genetic innovations driving cardiovascular science”

Endorsed and supported by the Heart Failure Association of the ESC,
and with the participation of the Working Group on Myocardial & Pericardial Diseases

Thursday 25 May

- 14.00** **SHUTTLE for participants from Milano Malpensa Airport to Varenna (Villa Monastero)**
Meeting point: Terminal 1 → exit doors 7-8 → bus parking → bus with ESCARDIO sign
- 16.25** **WELCOME by the chair of the Working Group on Myocardial Function
and the chair of the Working Group on Cellular Biology of the Heart**
- 16.30-18.30** **New Galaxies in Gene Regulation. Splicing, ribo sequencing and still coding non-coding RNAs**
Chairpersons: Denise Hilfiker-Kleiner (DE), Jean-Luc Balligand (BE)
- Dissecting the Genetic Basis of Translational Regulation in heart Failure**
Norbert Huebner (DE) (20 min + 10 min discussion)
- Abstracts presentations (10 min + 10 min discussion)*
- PW1/Peg3 expressing Cells Are Cardiac Adult Stem Cells with Fibrogenic Potential*
Jean Sebastien Hulot (FR)
- Stiffness-dependent YAP nuclear translocation is involved in human aortic valve interstitial
cells pathological programming*
Rosaria Santoro (IT)
- Mitochondrial biogenesis and shift from glycolysis to oxidative metabolism parallels
differentiation of adult progenitors to cardiac myocytes*
Emilie André (BE)
- Cardiac progenitor cells display a functional molecular circadian clock*
Sandra Crnko (NL)
- Panel comments and discussion (10 min)
- 18.30-19.15** **Pre-dinner speech** chaired by Leon de Windt (NL) & Mauro Giacca (IT)
- Role of RNA editing in vascular function*
Stefanie Dimmeler (DE)
- 19.30** **DINNER**

Friday 26 May

08.30-10.30 Non-Cardiac Cells in Cardiac Failure

Chairpersons: Stephane Heymans (NL), Dana Dawson (UK)

Cholinergic-sympathetic pathway primes immunity in hypertension and mediates brain-to-spleen communication

Daniela Carnevale (IT) (20 min + 10 min discussion)

Abstracts presentations (10 min + 10 min discussion)

DPP-4 inhibition by Linagliptin prevents cardiac hypertrophy and fibrosis in obese ZSF1 rats
Ilona Cuijpers (NL)

Reciprocal regulation of GRK2 and bradykinin receptor stimulation modulate Ca²⁺ intracellular level and permeability in endothelial cells
Jessica Gambardella (IT)

E-Selectin-Targeted Nano-Sized Polymer Attenuates Atherosclerosis Vascular Inflammation and Adverse Cardiac Remodeling
Olga Tsoref (IL)

Altered expression of endothelial-enriched microRNAs and GATA-2 in transplanted heart
Attila Kiss (AT)

Panel comments and discussion (10 min)

10.30-11.00 COFFEE BREAK

11.00-13.00 Immunomodulatory mechanisms of cardiac regeneration and cardioprotection

Chairpersons: Rainer Schulz (DE), Rosalinda Madonna (IT)

Targeting inflammation for cardiac regeneration and cardioprotection

Thomas Braun (DE) (20 min + 10 min discussion)

Abstracts presentations (10 min + 10 min discussion)

PI3K γ inhibition prevents cardiomyopathy and tumor growth during anthracycline chemotherapy by boosting cardiac autophagy and anti-cancer immune response
Mingchuan Li (IT)

Semaphorin 3A is needed for resolving inflammation in myocardial infarction
Marieke Rienks (NL/UK)

The Potential use of Cellular Therapeutics Against Cardiac Inflammation in Heart Failure Patients
Patricia van den Hoogen (NL)

Role of CD4⁺ T-cells after myocardial infarction
Ulrich Hofmann (DE)

Panel comments and discussion (10 min)

13.00-14.15 LUNCH

14.15-17.45 MODERATED POSTER SESSION 1 - Abstract N°1 to Abstract N°30 (CF appendix)
Discussants (5 posters each): Karin Sipido (BE), Hans Erik Bøtker (DK), Sophie Van Linthout (DE), Mauro Giacca (IT), Dana Dawson (UK), Joost Sluijter (NL)

17.45-18.00 COFFEE BREAK

18.00-20.00 SESSION BY THE WORKING GROUP ON MYOCARDIAL AND PERICARDIAL DISEASES
Chairpersons: Alida LP Caforio (IT), Urs Eriksson (S)

STAT3, complement and auto-immune myocarditis: what can we learn from mouse models?
Valeria Poli (IT) (20 min + 10 min discussion)

Abstracts presentations (10 min + 10 min discussion)

Cardiac remodeling in inflammatory cardiomyopathy: The expanding role of T cells during myocarditis
Wino Wijnen (CH)

Residues in the SH2 domain of the transcription factor STAT1 engaged in cytokine-induced gene expression
Theresa Riebeling (DE)

Effector CD4+ T cells protect against post-inflammatory cardiac fibrosis in myocarditis via antigen-independent mechanism
Martina Zarak Crnkovic (CH)

Modulation of pathological cardiac hypertrophy via interleukin-10 signalling in cardiomyocytes
Delvac Oceandy (UK)

Panel comments and discussion (10 min)

20.15 DINNER

Saturday 27 May

08.30-10.30 LEDUCQ CONSORTIUM THEMA PERSON

Short introduction on the Leducq consortium (5 min)

Thomas Thum (DE)

miRNAs in lipid metabolism and atherosclerosis (20 min + 10 min discussion)

Carlos Fernandez-Hernando (US)

Non-coding RNA based approaches for vascular disease (20 min + 10 min discussion)

Andrew Baker (UK)

Abstracts presentations (10 min + 10 min discussion)

Noncardiomyocyte MicroRNA-155 Mediates Septic Cardiomyopathy

Francisco Vasques-Nóvoa (PT)

Long non-coding RNA Malat-1 protects against cardiac pathological hypertrophy

Emma Robinson (BE)

Panel comments and discussion (10 min) Leon de Windt (NL), Thierry Pedrazzini (IT)

10.30-11.00 COFFEE BREAK

11.00-13.00 Genetics of cardiomyopathies - new mutations in human diseases and animal models?

Chairpersons: Jolanda van der Velden (NL), Antoine Bondue (BE)

Genetics of cardiomyopathies: past and future directions

Hugh Watkins (UK) (20 min + 10 minutes discussion)

Abstracts presentations (10 min + 10 min discussion)

EPO inhibits enhanced adipocyte formation in STAT3-knockout hearts

Elisabeth Stelling (DE)

Energy insufficiency in human hypertrophic cardiomyopathy caused by depressed energy-buffering systems

Vasco Sequeira (NL)

Titin Phosphorylation by Protein Kinase G as a Novel Mechanism of Diastolic Adaptation to Acute Load

André Leite-Moreira (PT)

Ubiquitin conjugating enzyme E2O modulates cardiomyocyte sarcomer composition and inflammatory response

Melanie Ricke-Hoch (DE)

Panel comments and discussion (10 min)

13.00 LUNCH

FREE AFTERNOON

17.30-19.00 MODERATED POSTER SESSION 2 - Poster N°31 to poster N°60 (CF appendix)
Discussants (5 posters each): Johannes Backs (DE), Nazha Hamdani (DE), Michelle Ciccarelli (IT), Rosalinda Madonna (IT), Peter Ferdinandy (HU), Jean Sebastien Hulot (FR)

19.00-19.40 Pre-dinner speech chaired by Ines Falcao-Pires (PT) and Johann Bauersachs (DE)

Past and Future of WGs (15 min)

Jean Luc Balligand (BE)

Initiatives of the Scientists of tomorrow (15 min)

Anke Smits (NL)

20.00 DINNER

Sunday 28 May

08.30-10.30 Extracellular vesicles in cardiovascular disease diagnostics and therapy

Chairpersons: Joost Sluijter (NL), Jonathan Leor (IS)

Exosomes in the blood: role of platelets

Edit Buzas (Hungary) (20 min + 10 min discussion)

Abstracts presentations (10 min + 10 min discussion)

Shock waves regenerate ischemic myocardium via exosome release

Can Tepeköylü (AT)

Cardiomyocyte-specific TGF β R1 deletion regulates miRNA expression patterns pre- and post-myocardial infarction

Peter Rainer (AT)

Slow release of cardiac progenitor cell-derived extracellular vesicles from a pH-switchable hydrogel

Emma Mol (NL)

Exosomes secreted by cardiomyocytes subjected to ischemia promote cardiac angiogenesis

Henrique Girao (PT)

Panel comments and discussion (10 min)

10.30-11.00 COFFEE BREAK

11.00-13.00 Epigenomic and transcriptomic approaches in heart diseases. Finding the way to novel targets for diagnosis and treatment in the post-genomic era.

Chairpersons: Manuel Mayr (UK), Peter Ferdinandy (HU)

Promises and pitfall of omics approaches in cardiovascular diseases

Cinzia Perrino (IT) (20 min + 10 min discussion)

Abstracts presentations (10 min + 10 min discussion)

Genetic Disruption of the Rac Inhibitor ArhGAP15 Leads to Aortic Valve Disease in Mice
Alessandra Ghigo (IT)

Comparing foetal to adult epicardial cell activation to optimise the epicardial post-injury response

Anke Smits (NL)

iPSC-derived cardiomyocytes as a model to study atrial fibrillation

Patrizia Dell'Era (IT)

G protein coupled receptor kinase 2 (GRK2) is fundamental in recovering mitochondrial morphology and function after exposure to ionizing radiation (IR)

Antonella Fiordelisi (IT)

Panel comments and discussion (10 min)

13.00-14.00 FREE LUNCH

14.00 SHUTTLE for participants from Varenna (Villa Monastero) to Airport (Milan Malpensa)

MEETING SUPPORTED WITH AN EDUCATIONAL GRANT BY:

AD INSTRUMENTS
CARDIOVASCULAR RESEARCH JOURNAL
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VISUAL SONICS

Annual meeting of the Working Groups on Myocardial Function and Cellular Biology of the Heart:
 “The multicellularity of the heart: genetic innovations driving cardiovascular science”
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Appendix: abstracts presented in poster sessions

Abstract Number	Abstract Title	Presenter First name	Presenter Last name	Institution and department name	Institution City	Institution Country	Poster Discussant
1	Noncardiomyocyte MicroRNA-155 Mediates Septic Cardiomyopathy	Francisco	Vasques-Nóvoa	Physiology and Cardiothoracic Surgery	Porto	Portugal	Karin Sipido (BE)
2	Shock waves regenerate ischemic myocardium via exosome release	Can	Tepeköylü	Department of Cardiac Surgery, Medical University of Innsbruck	Innsbruck	Austria	Karin Sipido (BE)
3	PW1/Peg3 expressing cells are cardiac adult stem cells with fibrogenic potential	Jean-Sebastien	Hulot	Sorbonne-Universités, UPMC Univ Paris 06 & INSERM, Institute of Cardio metabolism and Nutrition (ICAN)	Paris	France	Karin Sipido (BE)
4	The matricellular protein SPARC protects against adverse cardiac inflammation during viral myocarditis	Marieke	Rienks	King's British Heart Foundation Centre, King's College London, London, UK	London	United Kingdom	Karin Sipido (BE)
5	EPO inhibits enhanced adipocyte formation in STAT3-knockout hearts	Elisabeth	Stelling	Hannover Medical School, Molecular Cardiology	Hannover	Germany	Karin Sipido (BE)
6	Long non-coding RNA Malat-1 protects against cardiac pathological hypertrophy	Emma	Robinson	Experimental Cardiology, Dept of Cardiovascular Sciences, KU Leuven	Leuven	Belgium	Hans Erik Bøtker (DK)
7	Stiffness-dependent YAP nuclear translocation is involved in human aortic valve interstitial cells pathological programming	Rosaria	Santoro	Centro Cardiologico Monzino, IRCCS. Unità di Ingegneria Tissutale	Milan	Italy	Hans Erik Bøtker (DK)
8	Slow release of cardiac progenitor cell-derived extracellular vesicles from a pH-switchable hydrogel	Emma	Mol	UMC Utrecht Experimental Cardiology	Utrecht	Netherlands	Hans Erik Bøtker (DK)
9	Mitochondrial biogenesis and shift from glycolysis to oxidative metabolism parallels differentiation of adult progenitors to cardiac myocytes	Emilie	André	Université Catholique de Louvain - IREC	Woluwé Saint Lambert	Belgium	Hans Erik Bøtker (DK)
10	iPSC-derived cardiomyocytes as a model to study atrial fibrillation	Patrizia	Dell'Era	University of Brescia - Dept. Molecular and Translational Medicine	Brescia	Italy	Hans Erik Bøtker (DK)

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11	Energy insufficiency in human hypertrophic cardiomyopathy caused by depressed energy-buffering systems	Vasco	Sequeira	Department of Physiology, Institute for Cardiovascular Research, VU University Medical Center	Amsterdam	Netherlands	Sophie Van Linthout (DE)
12	Inhibition of Toll-Like receptor 3 prevents from calcific aortic valve disease	Leo	Pözl	Department of Cardiac Surgery, Medical University of Innsbruck	Innsbruck	Austria	Sophie Van Linthout (DE)
13	High glucose and hyperosmolar stress increase the expression of COX-2 and AQP1 in aortic tissue of type 1 diabetic mice developing atherosclerosis - Implication for unstable vascular disease in diabetes	Rosalinda	Madonna	Institute of Cardiology and Center of Excellence on Aging, Department of Neurosciences, Imaging and Clinical Sciences, "G. d'Annunzio" University	Chieti	Italy	Sophie Van Linthout (DE)
14	Titin Phosphorylation by Protein Kinase G as a Novel Mechanism of Diastolic Adaptation to Acute Load	André	Leite-Moreira	Faculty of Medicine of the University of Porto - Department of Surgery and Physiology	Porto	Portugal	Sophie Van Linthout (DE)
15	Ubiquitin conjugating enzyme E2O modulates cardiomyocyte sarcomer composition and inflammatory response	Melanie	Ricke-Hoch	Medical School Hannover, Molecular Cardiology AG Hilfiker-Kleiner	Hannover	Germany	Sophie Van Linthout (DE)
16	Exosomes secreted by cardiomyocytes subjected to ischemia promote cardiac angiogenesis	Henrique	Girao	IBILI-Faculty of Medicine University of Coimbra	Coimbra	Portugal	Mauro Giacca (IT)
17	Rp-bp: Discovering translated small ORFs and candidate roles in the heart	Christoph	Dieterich	University Hospital Heidelberg, Department of Internal Medicine III & Klaus Tschira Institute for Integrative Computational Cardiology	Heidelberg	Germany	Mauro Giacca (IT)
18	Comparing foetal to adult epicardial cell activation to optimise the epicardial post-injury response	Anke	Smits	Leiden University Medical Center, dept of Molecular Cell Biology	Leiden	Netherlands	Mauro Giacca (IT)
19	The effect of CD4+T-cell-derived microvesicles on cardiac microvascular endothelial cells as one of the mediators in pathogenesis of myocarditis.	Daria	Vdovenko	University of Zurich	Zurich	Switzerland	Mauro Giacca (IT)
20	ST2 Predicts Survival in Patients Undergoing Transcatheter Aortic Valve Implantation	Peter	Rainer	Medical University of Graz, Division of Cardiology	Graz	Austria	Mauro Giacca (IT)

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21	Human atrial trabeculae - a bioassay of cardioprotection by remote ischemic conditioning	Petra	Kleinbongard	Institut für Pathophysiologie, Westdeutsches Herz- und Gefäßzentrum, Universitätsklinikum Essen	Essen	Germany	Dana Dawson (UK)
22	Beat-tracker: an image-based algorithm for evaluation of the contractile activity of iPSC-CMs	Calogero	Giordano	Center for Inherited Cardiovascular Diseases, IRCCS Fondazione Policlinico San Matteo	Pavia	Italy	Dana Dawson (UK)
23	Generation of iPSC-CM from patients with genetic cardiomyopathy	Alexandra	Smirnova	Center for Inherited Cardiovascular Diseases, IRCCS Fondazione Policlinico San Matteo	Pavia	Italy	Dana Dawson (UK)
24	Crosstalk between glucocorticoids and NRG1/ERBB2 signalling axis in heart development and regeneration	Gabriele	D'Uva	IRCCS MultiMedica, Scientific and Technology Pole	Milan	Italy	Dana Dawson (UK)
25	Ultra structure of the intercalated disc in murine cardiomyocard revealed by volume electron microscopy	Jolanda	van Hengel	Department of Basic Medical Science, Faculty of Medicine and Health Sciences, Ghent University	Ghent	Belgium	Dana Dawson (UK)
26	Optimizing cardioprotective effects of paracrine factors in stem cell therapy for myocardial infarction: Differences in the secretome as a possible explanation for differential results of previous clinical trials	Peter	Jirak	Clinic of Internal Medicine II, Department of Cardiology, Paracelsus Medical University of Salzburg, Austria	Salzburg	Austria	Joost Sluijter (NL)
27	Neonatal apex-resection: an experimental model to balance Cardiomyocyte Proliferation, Neovascularization and Fibrosis	Diana	Nascimento	i3S/INEB	Porto	Portugal	Joost Sluijter (NL)
28	Unidirectional cyclic strain and coronary hemodynamic conditioning induce secretory phenotype in human saphenous vein smooth muscle cells	Maurizio	Pesce	Centro Cardiologico Monzino, IRCCS. Unità di Ingegneria Tissutale	Milan	Italy	Joost Sluijter (NL)
29	Toll-like receptor 4 signaling is involved in the cytoprotective effect of biglycan core protein in primary cardiomyocytes	Renáta	Gáspár	Department of Biochemistry	Szeged	Hungary	Joost Sluijter (NL)
30	Evidence for a crosstalk between ErbB2 and Notch-1 in cardiomyocytes	Edoardo	Bertero	Laboratory of Cardiovascular Biology, Department of Internal Medicine, University of Genova	Genova	Italy	Joost Sluijter (NL)

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31	PI3K γ inhibition prevents cardiomyopathy and tumor growth during anthracycline chemotherapy by boosting cardiac autophagy and anti-cancer immune response	Mingchuan	Li	Department of Molecular Biotechnology, Molecular Biotechnology Center, University of Torino	Torino	Italy	Johannes Backs (DE)
32	Semaphorin 3A is needed for resolving inflammation in myocardial infarction.	Marieke	Rienks	King's British Heart Foundation Centre, King's College London, London, UK	London	United Kingdom	Johannes Backs (DE)
33	Genetic Disruption of the Rac Inhibitor ArhGAP15 Leads to Aortic Valve Disease in Mice	Alessandra	Ghigo	University of Torino, Dept. of Molecular Biotechnology and Health Sciences	Torino	Italy	Johannes Backs (DE)
34	Cardiac remodeling in inflammatory cardiomyopathy: The expanding role of T cells during myocarditis	Wino	Wijnen	University of Zurich - Center for Molecular Cardiology	Zurich	Switzerland	Johannes Backs (DE)
35	Cardiomyocyte-specific TGF β R1 deletion regulates miRNA expression patterns pre- and post-myocardial infarction	Christopher	Schneider	Medical University of Graz, Division of Cardiology	Graz	Austria	Johannes Backs (DE)
36	DPP-4 inhibition by Linagliptin prevents HFpEF development in obese ZSF1 rats.	Ilona	Cuijpers	Maastricht University, Department of Cardiology	Maastricht	Netherlands	Nazha Hamdani (DE)
37	Reciprocal regulation of GRK2 and bradykinin receptor stimulation modulate Ca ²⁺ intracellular level and permeability in endothelial cells	Jessica	Gambardella	University of Salerno, Department of Medicine, Surgery and Odontology	Salerno	Italy	Nazha Hamdani (DE)
38	Effector CD4 ⁺ T cells protect against post-inflammatory cardiac fibrosis in myocarditis via antigen-independent mechanism	Martina	Zarak Crnkovic	Center for Molecular Cardiology, University of Zurich	Zurich	Switzerland	Nazha Hamdani (DE)
39	The Potential use of Cellular Therapeutics Against Cardiac Inflammation in Heart Failure Patients	Patricia	van den Hoogen	UMC Utrecht, Experimental Cardiology, department Heart and Lungs	Utrecht	Netherlands	Nazha Hamdani (DE)
40	Modulation of pathological cardiac hypertrophy via interleukin-10 signalling in cardiomyocytes	Delvac	Oceandy	Division of Cardiovascular Sciences, University of Manchester, UK	Manchester	United Kingdom	Nazha Hamdani (DE)

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41	Role of CD4+ T-cells after myocardial infarction	Ulrich	Hofmann	Universitätsklinikum Halle, Klinik und Poliklinik für Innere Medizin III	Halle (Saale)	Germany	Michelle Ciccarelli (IT)
42	Residues in the SH2 domain of the transcription factor STAT1 engaged in cytokine-induced gene expression	Theresa	Riebeling	University Medical Centre, Göttingen, Department of Psychosomatic Medicine and Psychotherapy	Göttingen	Germany	Michelle Ciccarelli (IT)
43	E-Selectin-Targeted Nano-Sized Polymer Attenuates Atherosclerosis Vascular Inflammation and Adverse Cardiac Remodeling	Olga	Tsoref	Tel Aviv University	Tel Aviv	Israel	Michelle Ciccarelli (IT)
44	Cardiac progenitor cells display a functional molecular circadian clock.	Sandra	Crnko	University Medical Centre Utrecht, Department of Cardiology	Utrecht	Netherlands	Michelle Ciccarelli (IT)
45	G protein coupled receptor kinase 2 (GRK2) is fundamental in recovering mitochondrial morphology and function after exposure to ionizing radiation (IR).	Antonella	Fiordelisi	"Federico II", University of Naples. Department of Advanced Biomedical Sciences	Naples	Italy	Michelle Ciccarelli (IT)
46	Adenine nucleotide translocase 1 overexpression intensifies Hsp27 signaling in cardiomyocytes	Andrea	Dörner	Charité´-Universitätsmedizin Berlin, Campus Benjamin Franklin, Dept. of Cardiology	Berlin	Germany	Rosalinda Madonna (IT)
47	Myocardial aging and immunological phen	Gustavo	Ramos	Universitätsklinikum Halle/ Innere Medizin III	Halle	Germany	Rosalinda Madonna (IT)
48	Altered expression of endothelial-enriched microRNAs and GATA-2 in transplanted heart	Attila	Kiss	Center for Biomedical Research The Ludwig Boltzmann Cluster for Cardiovascular Research Medical University of Vienna	Vienna	Austria	Rosalinda Madonna (IT)
49	Succinate is an early metabolic marker of ischaemic damage during acute myocardial infarction	Thomas	Krieg	University of Cambridge, Department of Medicine	Cambridge	United Kingdom	Rosalinda Madonna (IT)
50	Mesenchymal stromal cells inhibit NLRP3 inflammasome activation in an experimental model of Coxsackievirus B3-induced myocarditis	Kapka	Miteva	Charité, Berlin-Brandenburg Center for Regenerative Therapies	Berlin	Germany	Rosalinda Madonna (IT)

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51	Understanding the poor angiogenic capacity of the mammalian heart	Ambra	Cappelletto	ICGEB, Cardiovascular Biology	Trieste	Italy	Peter Ferdinandy (HU)
52	Targeting the heart rate to improve cardiac remodelling in peripartum cardiomyopathy	Aqeela	Imamdin	Hatter Institute for cardiovascular research in Africa, University of Cape Town, department of Medicine	Cape Town	South Africa	Peter Ferdinandy (HU)
53	Altered mechanosensing of cardiac progenitors in heart failure	Antonio Paolo	Beltrami	Istituto di Anatomia Patologica, Department of Medical and Biological Sciences	Udine	Italy	Peter Ferdinandy (HU)
54	Mechanosensitivity of cardiomyocyte progenitor cells: the strain response in 2D and 3D environments.	Noortje	Bax	Department of Biomedical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands	Eindhoven	Netherlands	Peter Ferdinandy (HU)
55	Warm vs. cold cardioprotection: impact of temperature of cardioplegic solution on microRNA profile in a pig model of cardiopulmonary bypass	Bruno K	Podesser	Center for Biomedical Research The Ludwig Boltzmann Cluster for Cardiovascular Research Medical University of Vienna	Vienna	Austria	Peter Ferdinandy (HU)
56	A-kinase anchoring proteins: key players in cardiac protection	Dario	Diviani	Department of Pharmacology, University of Lausanne	Lausanne	Switzerland	Jean Sebastien Hulot (FR)
57	YB1 and its impact on cardiac cell signaling	Jacqueline	Heger	Justus-Liebig University Institute of Physiology	Giessen	Germany	Jean Sebastien Hulot (FR)
58	Human Saphenous Vein Progenitor cells are susceptible to mechanical stimulation: novel insights in pathologic programming of saphenous vein bypass graft disease	Gloria	Garoffolo	Centro Cardiologico Monzino, IRCCS. Unità di Ingegneria Tissutale	Milan	Italy	Jean Sebastien Hulot (FR)
59	Noninvasive Index of Left Ventricular Contractility: Peak Aortic Acceleration	Nicholas	Pansters	Baylor College of Medicine, Department of Medicine	Houston	United States of America	Jean Sebastien Hulot (FR)
60	Effect of moderate altitude on endothelial microparticles and biomarkers of cardiovascular inflammation (with or without endothelin receptor blockade)	Moritz	Mirna	Clinic of Internal Medicine II, Department of Cardiology, Paracelsus Medical University of Salzburg, Austria	Salzburg	Austria	Jean Sebastien Hulot (FR)