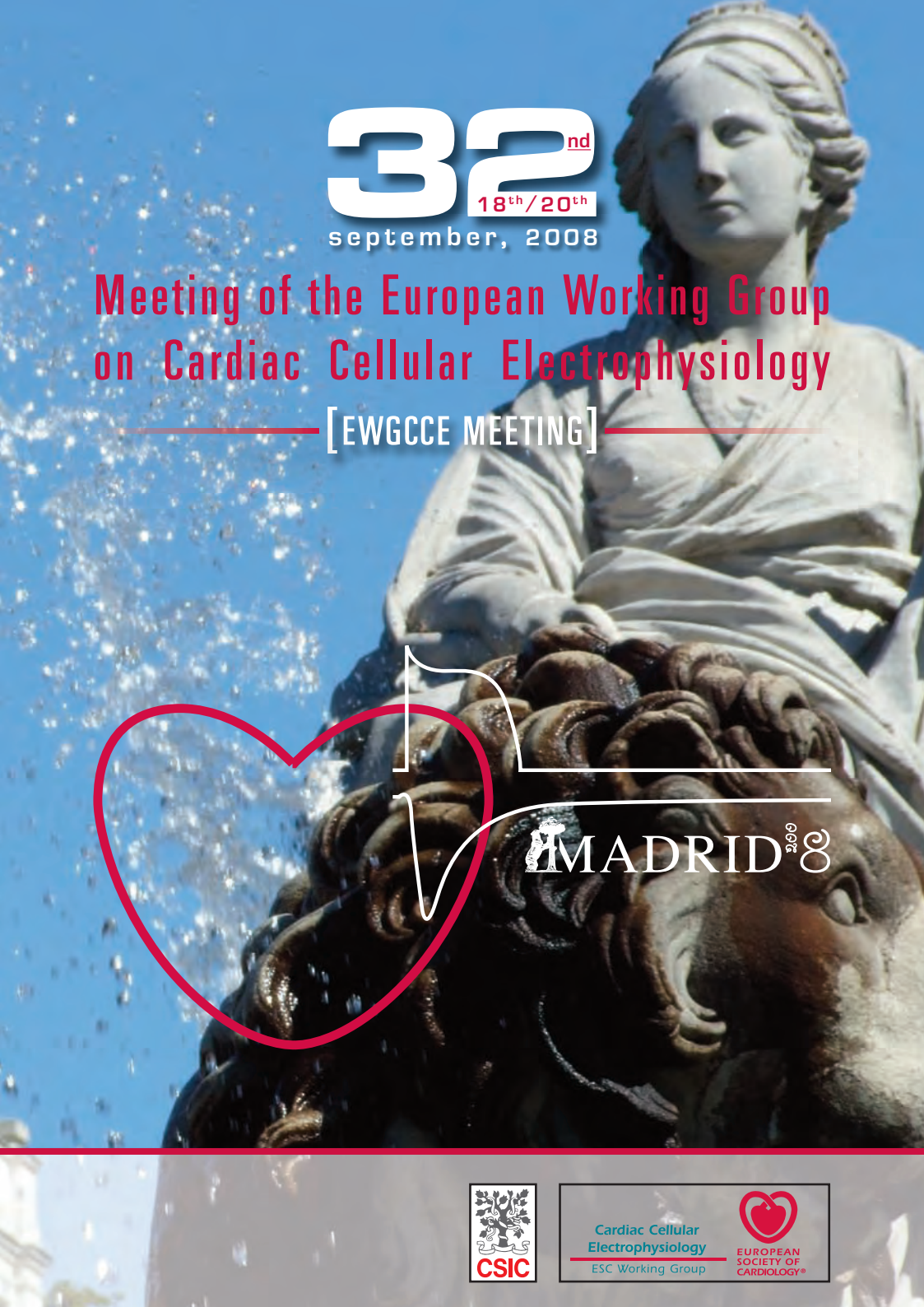

32nd

18th/20th

september, 2008

Meeting of the European Working Group on Cardiac Cellular Electrophysiology

[EWGCCE MEETING]

MADRID 2008

CSIC

Cardiac Cellular Electrophysiology

ESC Working Group

EUROPEAN SOCIETY OF CARDIOLOGY®

CONTACT.

ORGANISING COMMITTEE:

- Carmen Valenzuela
- Carmen Delgado
- Teresa González
- María Fernández-Velasco
- Miren David
- Gema Ruiz-Hurtado
- Nieves Gómez
- Cristina Moreno
- Álvaro Macías

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DEAR COLLEAGUES

On behalf of the local organising committee it is a great pleasure to welcome you to Madrid on the occasion of the 32nd Meeting of the European Working Group on Cardiac Cellular Electrophysiology.

The aim of the Workshop is to present and discuss recent information on cardiac electrogenesis and arrhythmias, E-C coupling, cardiac development and growth, and stimulate a creative exchange of ideas among renowned scientists and young researchers from many different countries.

In addition to the exciting scientific program, we trust that you will enjoy the social program. The Opening Session will be held in the *Thyssen-Bornemisza Museum* with a guided visit followed by a cocktail. The conference venue will be held in the heart of the city: the central house of the *Consejo Superior de Investigaciones Científicas (CSIC)* Finally, the social Dinner will be held in an historical building just in the center of Madrid: *Palacio de Linares* (today Casa de América)

With kind regards,

Carmen Valenzuela and Carmen Delgado

THURSDAY SEPTEMBER 18TH

THYSSEN-BORNEMISZA MUSEUM

21:00 Welcome cocktail with a guided visit to the Thyssen-Bornemisza Museum.

FRIDAY SEPTEMBER 19TH

CSIC

Symposium on Atrial Fibrillation and electrophysiological mechanisms involved in its genesis and treatment.

Chairpersons:
Barbara Casadei and Antonio Zaza

08:20 Welcome

08:30 LECTURE:
Rotors and spiral waves in atrial fibrillation.
Dr. José Jalife
Center for Arrhythmia Research, University of Michigan, Ann Arbor, Michigan, U.S.A.

09:30 Electrophysiological characteristics of IKur.
Dr. Dirk J. Snyders
University of Antwerpen, Belgium

09:50 Kv1.5 channels: traffic.
Dr. Michael M. Tamkun
Colorado State University, Fort Collins, U.S.A.

10:10 Pharmacological consequences of Kv1.5 assembly with beta subunits.
Dr. Teresa González
Instituto de Investigaciones Biomédicas, CSIC-UAM, Madrid, Spain

10:30 Kv1.5 channels and atrial fibrillation.
Dr. Ursula Ravens
University of Technology of Dresden, Germany

10:50 Block of Kv1.5. Useful drugs in the treatment of atrial fibrillation.
Dr. Juan Tamargo
Department of Pharmacology, Universidad Complutense, Madrid, Spain

11:10 • 13:00 Posters (odd numbers) and Refreshments.

13:00 LUNCH TIME

Excitation-contraction coupling and pathologies.

Chairpersons:
Ana M. Gómez and Alexandra Zahradníková

14:30 • 15:30 **LECTURE:**
Excitation-contraction coupling and pathologies.
Dr. Donald Bers
University of California, Davis School of Medicine, California, U.S.A.

15:30 • 17:00 **ORAL COMMUNICATIONS:**

15:30 • 15:45 **Apelin effects on dynamic characteristics of active shortening in mammalian ventricular cardiomyocytes.**
Bollensdorff C1, Lookin O2, Fajardo G3, Ho M3, Quertermous T3, Ashley E3, Kohl P1.
1)Cardiac MEF Group, Department of Physiology, Anatomy and Genetics, Oxford OX1 3PT, University of Oxford, United Kingdom 2) Ural Branch of Russian Academy of Sciences, Ekaterinburg, Russian Federation, 3) Stanford University Division of Cardiovascular Medicine, U.S.A.

15:45 • 16:00 **Altered Ca^{2+} signaling in sinus nodal tissue obtained from a CPVT knock in mouse model.**
Ñeco P[1], Torrente A[2], Napolitano C[3], Priori SG[3], Mangoni ME[2], Richard S[1], Gomez AM[1].
1)INSERM U637, Montpellier, France 2) UMR 5203, Montpellier France, 3) IRCCS Pavia, Italy

16:00 • 16:15 **Istoraxime effects on SR calcium release in mouse ventricular myocytes.**
Alemanni M., Rocchetti M., Mostacciuolo G. Altomare C. Marangoni S. Zaza A.
University of Milan-Bicocca, Italy

16:15 • 16:30 **Failure of intracellular Ca2+ wave propagation in tachycardia-induced atrial remodelling.**
Greiser M[1], Harks E[1], Verheule S[1], Ravens U[2], Allessie M[1], Dobrev D[2], Schotten U[1].
1) Department of Physiology, Maastricht University, Maastricht, the Netherlands 2) Department of Pharmacology and Toxicology, Dresden University of Technology, Dresden, Germany

16:30 • 16:45 **Regulation of the Ca2+-sensitive transcription factor NFAT in vascular endothelial cells and cardiac myocytes.**
Rinne A[1], Kapur N[2], Bossuyt J[3], Bers DM[3], Banach K[2] and Blatter LA[1]
1) Rush University, Department of Molecular Biophysics and Physiology, Chicago, U.S.A. 2) UIC Chicago, Department of Medicine, Section of Cardiology, U.S.A. 3) UC Davis, Department of Pharmacology, Davis California, U.S.A.

16:45 • 17:00 **A humanised mouse model of cardiac disease: effects of the maintained heart-failure phenotype of L-type calcium channel gating by induced beta2-subunit overexpression.**

Matthes J[1], Beetz N[2], Mészáros J[1], Gilsbach R[2], Barreto F[2], Schwartz A[3], Hein L[2], Herzig S[1].

1) Department of Pharmacology, University of Cologne, Cologne, Germany 2) Department of Pharmacology, University of Freiburg, Freiburg im Breisgau, Germany 3) University of Cincinnati College of Medicine, Institute of Molecular Pharmacology and Biophysics, University of Cincinnati, Cincinnati, Ohio, U.S.A.

17:00 • 19:00 **POSTERS (EVEN NUMBERS) AND REFRESHMENTS.**

21:00 **DINNER.** *(Palacio de Linares: Casa de América)*

Arrhythmias and antiarrhythmics.

Chairpersons:
Ursula Ravens and András Varro

09:30 • 11:15 ORAL COMMUNICATIONS:

09:30 • 09:45 The sodium channel beta4-subunit: a genetic modifier of cardiac sodium channelopathy.
Remme CA, Scicluna B.P, Verkerk A.O, Amin A.S, Chevalier C, Houlgatte R, Wilde AAM, Tan HL, Veldkamp MW, de Bakker JMT, Bezzina CR.
Heart Failure Research Center, Department of Experimental Cardiology, Academic Medical Center, Amsterdam, The Netherlands

09:45 • 10:00 Chamber-specific Differences of IK,ACh Remodelling in Patients with Atrial Fibrillation.
Voigt N, Bollmann B, Trausch A, Christ T, Wettwer E , Matschke K , Ravens U, Dobrev D.
Department of Pharmacology and Toxicology, Dresden, Germany

10:00 • 10:15 Beta-adrenergic modulation of IKs gating: a modelling study.
Zaza A
University of Milan - Bicocca, Italy

10:15 • 10:30 Effects of NO on human potassium channels.
Gómez R, Caballero R, Amorós I, Barana A, Tamargo J, Delpón E
Department of Pharmacology, Universidad Complutense, Madrid, Spain

10:30 • 10:45 Fever-induced arrhythmias in type 2 long QT syndrome.
Amin A, Herfst L, Delisle B, Rook M, Bezinna C, Tan H, January C, Wilde A.
Academic Medical Center, Amsterdam, The Netherlands Cellular and Arrhythmia Research Program, University of Wisconsin, Madison, Wisconsin, U.S.A.; Department of Physiology, Division of Heart and Lungs, University Medical Centre Utrecht, Utrecht, The Netherlands

10:45 • 11:00 Increased repolarization reserve as a new anti-arrhythmic principle.
Grunnet M, Diness TG, Olesen SP, Jespersen T, Hansen RS
University of Copenhagen and NeuroSearch A/S

11:00 • 11:15 Arrhythmia vulnerability of aged haploinsufficient Cx43 mice is determined by heterogeneous downregulation of Cx43 combined with increased fibrosis.
Jansen JA[1], van Veen TA[1], Bosch AA[1], van der Nagel R[1], Vos MA[1], de Bakker JM[2], Van Rijen HV[1]
1)Univ Medical Ctr Utrecht, Utrecht, Netherlands 2) Interuniversity Cardiology Inst of the Netherlands, Utrecht, The Netherlands

11:15 • 11:30 COFFEE BREAK

Stem cells: Cardiac engineering.

Chairpersons:
Elissabetta Cerbai and Dario DiFrancesco

11:30 • 12:45 ORAL COMMUNICATIONS:

11:30 • 11:45 **The functional electronome of cardiomyocytes from human cardiaca progenitor cells.**

Van Veen TAB de Boer TP., Jonsson MKB, Kok GJM, Smits AM, Goumans MJ, Doevendans PA, de Bakker JMT, van der Heyden MAG.
Experimental Cardiology Group, Center for Heart Failure Research, Academic Medical Center, Amsterdam, the Netherlands

11:45 • 12:00 **Differentiation of cardiac-type calcium release mechanism in cardiac precursor cells.**

Marangoni S[1], Altomare C[1], Barile L[2], Rocchetti M[1], Mostacciuolo G[1], Giacomello A[2], Messina E[2], Zaza A[1]
1) Department of Biotechnologies and Biosciences, University of Milano-Bicocca, p.za della Scienza 2, 20126 Milano, Italy 2) Department of Experimental Medicine University of Rome "La Sapienza", Italy

12:00 • 12:15 **Functional and molecular characterization of murine embryonic stem cell-derived pacemaker cells.**

Capilupo D, Crespi A, Scavone A, Simone C, Mazzaferro S, Barbuti A, DiFrancesco D.
Dept Scienze Biomolecolari e Biotecnologie, Milano, Italy

12:15 • 12:30 **Electrophysiological properties of skeletal muscle-derived progenitor cells.**

Poulet C
Department of Pharmacology and Toxicology, Technical University of Dresden, Germany

12:30 • 12:45 **Bone marrow-derived stromal cells home to and remain in the infarcted rat heart, but fail to improve function: An in vivo MRI study.**

Stuckey DJ[1], Carr CA[1], Sweeney D[2], Tyler DJ[1], Martin-Rendon E[2], Radda GK[1], Harding SE[3], Watt SM[2], Clarke K[1].
1)Department of Physiology, Anatomy and Genetics, University of Oxford, United Kingdom 2) National Blood Service, Oxford Centre, John Radcliffe Hospital, Oxford, United Kingdom 3) Imperial College, London, United Kingdom

12:45 EWGCCE BUSINESS MEETING

13:30 LUNCH TIME

POSTERS

P-1.

Atrophic remodeling of the heart secondary to mechanical unloading involves increased protein phosphatase 1 and 2A activity.

Schwoerer AP[1], Neuber C[2], Schmechel A[2], Melnychenko I[2], Mearini G[2], Boknik P[3], Schmitz W[3], Ehmke H[1], Eschenhagen T[2], El-Armouche A.

1) University Hamburg Eppendorf, Germany 2) Experimental and Clinical Pharmacology and Toxicology, University Medical Center Hamburg-Eppendorf, Germany 3) Department of Pharmacology and Toxicology, University of Muenster, Germany

P-2.

Modulation of Kv1.5-Kvbeta1.3 interaction by kinases.

David M[1], Arias C[1], Martinez-Marmol R[2], Gonzalez T[1], Guizy M[1], Vicente R[2], Felipe A[2], Tamkun MM[3], Valenzuela C[1].

1) Instituto de Investigaciones Biomédicas CSIC/UAM, Madrid, Spain 2) Molecular Physiology Laboratory, Institut de Biomedicina, Departament de Bioquímica i Biologia Molecular, Universitat de Barcelona, Spain 3) Department of Biomedical Sciences, Colorado State University, Fort Collins, CO, U.S.A.

P-3.

Effects of urocortin on L-type calcium current in rat ventricular myocytes.

Calderón E[1], Cachofeiro V[2], Ordóñez A[1], Smani T[1], Delgado C[2].

1) Hospital Virgen del Rocio, Sevilla, Spain 2) Departamentos de Fisiología y Farmacología Facultad de Medicina y Centro de Investigacione Biológicas UCM-CSIC, Madrid, Spain

P-4.

Role of TNF-α on Ca2+ homeostasis alterations in cardiomyocytes from type 2 diabetic mice.

Ruiz-Hurtado G[1], Pereira L[2], Delgado C[3], Gómez AM[1].

1) INSERM U-637, Montpellier, France 2) Laboratory of Pharmacology and Toxicology, UC Davis, U.S.A. 3) Departamento de Farmacología, Facultad de Medicina y Centro de Investigaciones Biológicas (CSIC-UCM), Madrid, Spain

P-5.

Calcium handling in catecholaminergic polymorphic ventricular tachycardia.

Fernandez-Velasco M[1], Benitah JP[1], Napolitano C[2], Priori S[2], Richard S[1], Gomez AM[1].

1) INSERM U-637, Universita de Montpellier 1, Montpellier, France 2) Molecular Cardiology, IRCCS Fondazione Salvatore Maugeri, Pavia, Italy

P-6.

The sex hormone-induced upregulation of the L-type Ca2+ current in rat left ventricular myocytes is gender specific and modulated by corticosterone.

Wagner M, Moritz A, Rudakova E, Volk T.

FAU Erlangen-Nuernberg, Germany

P-7.

Electrophysiology of myocytes from pig left ventricular muscle in control and from 24 hours brain dead pig hearts, additionally perfused for 24 hours.

Arlock P, Steen S, Arner A.

Dept Physiol Pharmacol, Karolinska Inst, Stockholm, Sweden; Xenodevice AB, Igelosa, Lund, Sweden

P-8.

Phosphodiesterases 3- and 4-controlled compartments, activated by ß1- and ß2-adrenoceptors, differ for L-type Ca2+ current and inotropy in rat heart.

Christ T[1], Galindo-Tovar A[1], Thoms M[1], Ravens U[1], Kaumann AJ[2].

1) Department of Pharmacology and Toxicology, Dresden University of Technology, Dresden, Germany 2) Department of Physiology, Development & Neuroscience, University of Cambridge, United Kingdom

P-9.

Comparison of the role of IKs and IK1 in repolarization reserve in rabbits.

Tabori K, Varro A, Papp JG, Lengyel C, Baczko I.

Department of Pharmacology and Pharmacotherapy, University of Szeged, Hungary

P-10.

Increased short-term variability of the QT interval in athletes.

Baczko I, Lengyel C, Orosz A, Papp JG, Varro A.

Department of Pharmacology and Pharmacotherapy, University of Szeged, Hungary

P-11.

Effect of citrus juices on the variability of repolarization in humans.

Orosz A, Baczko I, Lengyel C, Papp JG, Varro A.

Department of Pharmacology and Pharmacotherapy, University of Szeged, Hungary

P-12.

Differential regulation of Navbeta subunits during myogenesis.

Martínez-Mármol R[1], David M[2], Gonzalez T[2], Valenzuela C[2], Felipe A[1].

1) Molecular Physiology Laboratory, Institut de Biomedicina, Departament de Bioquímica i Biologia Molecular, Universitat de Barcelona, Spain 2) Instituto de Investigaciones Biomédicas "Alberto Sols", CSIC/UAM, Madrid, Spain

P-13.

Electrophysiological evaluation of novel blockers of If current.

Del Lungo M[1], Melchiorre M[2], Sartiani L[1], Biel M[3], Romanelli MN[2], Cerbai E[1].

1) Center of Molecular Medicine (C.I.M.M.B.A), University of Florence, Italy 2) Pharmaceutical Science Department, University of Florence, Italy 3) Department of Pharmacy Center for Drug Research Institute of Pharmacology, University of Munchen, Germany

P-14.

Molecular and cellular remodeling in familiar hypertrophic cardiomyopathy: a study in human biopsies.

Stillitano F, Suffredini S, Del Lungo M, Sartiani L, Mugelli A, Cerbai E.

Center of Molecular Medicine C.I.M.M.B.A., Florence, Italy

P-15.

New insights on the mechanisms of mineralocorticoid induced cardiac arrhythmias.

Gómez AM[1], Rueda A[1], Sainte-Marie Y[2], Pereira L[1], Zissimopoulos S[3], Zhu X[4], Perrier E[1], Perrier R[1], Latouche C[2], Richard S[1], Jaisser F[2], Lai FA[3], Valdivia HH[4], Benitah JP[1].

1) INSERM U637, Université Montpellier, France 2) INSERM U772, Collège de France, France 3) Wales Heart Research Institute, Cardiff University School of Medicine, United Kingdom 4) Department of Physiology, University of Wisconsin Medical School, U.S.A.

P-16.

On the mechanisms of ultrasound contrast agents induced arrhythmias.

Tran TA[1], Bougnoux P[2], Tranquart F[1], Bouakaz A[1], Le Guennec JY[2].

1) INSERM, U930, Tours, F-37000 France; Univ Francois Rabelais, Tours, France 2) INSERM, U921, Tours, F-37000 France; Univ Francois Rabelais, Tours, France

P-17.

Electrophysiological remodeling in septal myocytes from fhCM patients: focus on repolarization.

Coppini R, Suffredini S, Sartiani L, Cerbai E, Mugelli A.

Center of Molecular Medicine C.I.M.M.B.A. and Department of Medical Surgical Critical Area, University of Florence, Italy

P-18.

α-helical structure of the S4-S5 linker region: structural scaffold for critical protein interactions in the KCNQ1 channel.

Boulet IR[1], Raes AL[2], Labro AJ[2], Snyders DJ[2].

1) Department of Cardiology, Cardiovascular Research Institute, Maastricht, The Netherlands 2) Laboratory for Molecular Biophysics, Physiology and Pharmacology, Department of Biomedical sciences, University of Antwerp, Antwerp, Belgium

P-19.

Multiple Kv1.5 targeting to membrane surface microdomains.

Martínez-Mármol R[1], Solé L[1], Villalonga N[1], Tamkun MM[3], Soler C[2], Vicente R[4], Felipe A[1].

1) Molecular Physiology Laboratory, Departament de Bioquímica i Biologia Molecular, Institut de Biomedicina, Universitat de Barcelona, Barcelona, Spain 2) Departament de Patologiai Terapèutica Experimental, Universitat de Barcelona-Campus de Bellvitge, Hospitalet de Llobregat, Spain 3) Department of Biomedical Sciences, Colorado State University, Ft Collins, U.S.A. 4) Departament de Ciencies Experimentals i de la Salut, Universitat Pompeu Fabra, Barcelona, Spain

P-20.

Vulnerability to torsade de pointes arrhythmias in the chronic AV block dog is not determined by changes in conduction velocity.

Boulaksil M[1], Antoons G[1], Houtman M[1], de Boer TP[1], Wilders R[2], Beekman JD[1], van der Nagel R[1], van Veen TA[1], van der Heyden MA[1], Vos MA[1], de Bakker JM[3], van Rijen HV[1].

1) Univ Medical Ctr Utrecht, Utrecht, Netherlands 2) Academic Medical Ctr, Amsterdam, Netherlands 3) Interuniversity Cardiology Inst of the Netherlands

P-21.

Inducible TBX3 overexpression as a tool for biopacemaker engineering.

Boink GJJ[1], Bakker ML[1], Verkerk AO[1], Bakker D[1], de Bakker JMT[1], Seppen J[2], Christoffels VM[1], HL Tan[1].
1) Heart Failure Research Center ; 2) AMC Liver Center, Academic Medical Center, Meibergdreef 9, 1105 AZ Amsterdam, The Netherlands

P-22.

Pentamidine inhibits Kir2.1 mediated inward rectifier current by a dual mechanism.

Nalos L, de Boer TP, Kok B, Houtman MJC, van Veen TAB, Rook MB, Vos MA, van der Heyden MAG.
Department of Medical Physiology, Division of Heart & Lungs, UMC Utrecht, The Netherlands

P-23.

Modification of Ito channel-drug interactions by DPL ancillary subunits.

Radicke S[1], Cotella D[2], Sblattero D[2], Ravens U[1], Wettwer E[1], Santoro C[2].
1) Department of Pharmacology and Toxicology, Dresden University of Technology, Germany 2) Department of Medical Science Applied Biology Laboratory, University of Eastern Piemont, Italy

P-24.

Molecular characterization of electrical and contractile remodeling in the pressure overloaded mouse heart.

Boulaksil M[1,2], Noorman M[1,2], Demolombe S[3], van Veen TAB[2], Engelen MA[2,4], Charpentier F[3], Stein M[2,5], Vos MA[2], de Bakker JMT[1,2,6], van Rijen HVM[2].
1) Interuniversity Cardiology Institute of The Netherlands, Utrecht, The Netherlands 2) Department of Medical Physiology, Division of Heart & Lungs, University Medical Center Utrecht, Utrecht, The Netherlands 3) INSERM U533, L'Institut du Thorax, Université de Nantes, Faculté de Médecine, France 4) Department of Cardiology and Angiology, University Hospital Münster, Münster, Germany 5) Department of Cardiology, Division of Heart & Lungs, University Medical Center Utrecht, Utrecht, The Netherlands 6) Heart Failure Research Center, Academic Medical Center, Amsterdam, The Netherlands

P-25.

Tubulin polymerization modifies cardiac sodium channel expression and gating.

Casini S[1,2], Tan HL[1], Demirayak I [1], Remme CA[1], Amin AS[1], Scicluna BP[1], Chatyan H[1], Ruijter JM[1], Bezzina C R[1], Van Ginneken ACG[1], Veldkamp MW[1].
1) Heart Failure Research Center, Academic Medical Center, Amsterdam, the Nethederlands. 2) Center of Molecular Medicine, (C.I.M.M.B.A.) University of Florence, Florence, Italy

P-26.

Electrophysiological characteristics of heart ventricular papillary muscles from control and diabetic histidine decarboxylase knock-out and wild-type mice.

Szebeni A[1], Falus A[2], Kecskeméti V[1].
1) Department of Pharmacology and Pharmacotherapy, Semmelweis University, Budapest, Hungary; 2) Department of Genetics, Cell- and Immunobiology, Semmelweis University, Budapest, Hungary

P-27.

Prevention of heart failure induced ionic and electrophysiological changes by activation of PPARα.

Baartscheer A[1], Albrecht B[2], Schäfer S [2], Fiolet JWT[1].
1) Center for Heart Failure Research Academic Medical Center, Amsterdam, Netherlands 2) Cardiology Research, Bayer Schering Pharma, Wuppertal, Germany

P-28.

Effects of thienopyridines and thienopyrimidiones on L-type calcium current in isolated guinea-pig ventricular myocytes.

Pelzmann B[1], Zorn-Pauly K[1], Hallström S[2], Jakubowski A[3], Lang P[1], Koidl B[1].
1) Institute of Biophysics, Medical University Graz, Austria. 2) Institute of Physiological Chemistry, Medical University Graz, Austria. 3) Department of Experimental Pharmacology, Jagiellionian University School of Medicine, Krakow, Poland

P-29.

Studying axial stretch effects on regionally isolated cardiomyocytes from Guinea pig right and left ventricles.

Bahoshy M[1], Bollensdorff C[2], Garny A[1], Rodriguez B[2], Kohl P[1].
1) Cardiac Mechano-Electric Feedback Group, Department of Physiology, Anatomy and Genetics, Oxford University; 2) Computational Biology Group, University of Oxford Computing Laboratory, Oxford, United Kingdom

P-30.

Competition between b-subunits of cardiac L-type Ca2+ channels at single channel level that is potential to inhibit channel hyperactivity.

Jangsangthong W[1,2], Kuzmenkina E[1], Matthes J[1], Hullin R[3], Schwartz A[4], Herzig S[1,2].
1) Department of Pharmacology, University of Cologne, Cologne Germany; 2) Center of Molecular Medicine, University of Cologne, Cologne Germany; 3) Department of Cardiology, Inselpital Bern, Bern, Switzerland; 4) Institute of Molecular Pharmacology and Biophysics, University of Cincinnati, Cincinnati, Ohio U.S.A.

P-31.

Ca2+ handling in arterial vascular smooth muscle cells from diabetic mice.

Rueda A[1], Medeiros M[2], Pinho JF[2], Benitah JP[3], Lemos VS[2], Richard S[3], Cruz JS[2], Gómez AM[3].
1) Instituto Nacional de Cardiología, México D.F., México. 2) Universidade Federal Minas Gerais, Belo Horizonte, Brazil. 3) U-637, INSERM, Montpellier, France

P-32.

Signalisation cascade involved in Epac effects on Ca2+ handling.

Pereira L[1], Fernández-Velasco M[1], Morel E[2], Lezoualch F[2], Gómez AM[1].
1) U-637, INSERM, Montpellier, France 2) U769 INSERM, Chatenay Malabri, France

P-33.

Mutation of the Caveolin-Interacting Sequence of the rabbit HCN4 channel affects its cellular localization.

Mazzocchi N, Barbuti A, DiFrancesco D.
Department of Biomolecular Sciences and Biotechnology, The PaceLab, University of Milano, Milano, Italy

P-34.

Functional and molecular characterisation of an HCN4 knock-out mouse.

Mandelli G, Viscomi C, Micheloni S, Barbuti A, Baruscotti M, DiFrancesco D. Dept. of Biomolecular Sciences and Biotechnologies, University of Studies of Milan, Italy

P-35.

SEA0400 has positive inotropic effect in rat, but not in guinea pig and canine ventricular myocardium.

Horváth B[1], Szentandrássy N[1], Jóna I[1], Almássy J[1], Papp Z[2], Hertelendi Z[2], Acsai K[3], Tóth A[3], Varró A[3], Nánási PP[1].

1) University of Debrecen, Medical and Health Science Centre, Department of Physiology, Hungary 2) University of Debrecen, Medical and Health Science Centre, Division of Clinical Physiology, Hungary 3) University of Szeged, Department of Pharmacology and Pharmacotherapy, Hungary

P-36.

Dietary fish oil induced bradycardia in rabbit is caused by a reduction in the pacemaker current.

den Ruijter HM, Bourier J, BoUnited Kingdomens BJ, Coronel R, Verkerk AO. Heart Failure Research Center, Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands

P-37.

Reduced open probability of the ryanodine receptor in mouse myocytes with cardio-specific overexpression of FKBP12.6.

Biesmans L, Bito V, Vinet L, Rouet P, Gellen B, Mercadier JJ, Sipido KR. Division of Experimental Cardiology, University of Leuven, Belgium

P-38.

Structural and functional remodeling of the coupling between sarcolemmal Ca2+ channels and the ryanodine receptor in a sheep model of atrial fibrillation.

Lenaerts I, Bito V, Holemans P, Heidbüchel H, Sipido KR, Willems R. Division of Experimental Cardiology, University of Leuven, Belgium

P-39.

Cytoskeleton protein 4.1R affects sodium current in cardiomyocytes from transgenic mice with prolonged QT interval.

Stagg MA, Carter E, Siedlecka U, Soppa GK, Mead F, Bennett P, Taylor-Harris P, Pinder JC, Yacoub MH, Baines A, Terracciano CM. Imperial College London, King's College London, and University of Kent, United Kingdom

P-40.

Calcium regulation in mice with constitutively activated PI3Kγ.

Dolgetta S[1], Fitou A[1], Gallina C[1], Ramella R[1], Brero A[1], Alloatti G[1], Levi R[1], Hirsch E[2], Gallo MP[1]. 1) Department of Animal and Human Biology, University of Turin, Turin, Italy 2) Department of Genetics, Biology and Biochemistry, Molecular Biotechnology Center, University of Turin, 10126 Turin, Italy

P-41.

A mouse transgenic model to study HGF role in cardiac development and function.

Fitou A[1], Dolgetta S[1], Boero O[1], Piscioneri P[1], Riess I[2], Leo C[2], Levi R[1], Crepaldi T[2].
1) Department of Animal and Human Biology, University of Turin, Turin, Italy 2): Department of Anatomy, Pharmacology, and Forensic Medicine, University of Turin, Turin, Italy

P-42.

The anti-adrenergic effect of VS-1 in rat ventricular myocardium: an endothelium mediated process involving the PI3K-eNOS pathway through an endocytosis-coupled mechanism.

Ramella R, Boero O, Brero A, Dolgetta S, Levi R, Alloatti G, Gallo MP.
Department of Animal and Human Biology- University of Turin, Italy

P-43.

Role of the late sodium current on the myocardial adaptation to chronic hypoxia.

Rocchetti M, Mostacciuolo G, Chisci R, Menduni F, Zaza A.
University of Milan - Bicocca, Italy

P-44.

Mechanisms of ventricular heart rate adaptation as an indicator of arrhythmic risk.

Pueyo E, Laguna P, Rodríguez B.
Oxford University Computing Laboratory, Oxford, United Kingdom Instituto de Investigación en Ingeniería de Aragón. Universidad de Zaragoza, Spain

P-45.

Electrophysiological and EC coupling phenotype of B2-KO mice.

Roman-Campos D[1], Leonardo-Duarte H[1], Lauton-Santos, S[1,4], Pesquero JL[1], Pesquero JB[2], Gomes ER[1], Bader M[3], Guatimosim S[1], Gomez AM[4], Benitah JP[4], Cruz JS[1].
1) Universidade Federal Minas Gerais, Belo Horizonte, Brazil. 2) Universidade Federal de Sao Paulo, Brazil. 3) Max-Delbrck-Center for Molecular Medicine, Berlin, Germany 4) U-637, INSERM, Montpellier, France

P-46.

Does small conductance calcium activated potassium channel contribute to cardiac repolarization?.

Nagy N[1]; SzŰts V[1]; Horváth Z[2]; Seprényi G[3]; Farkas AS[1,2]; Acsai K[2]; Bitay M[4]; Papp JG[1,2]; Nanasi PP[5], Varró A[1,2]; Tóth A[1].
1) Department of Pharmacology and Pharmacotherapy. 2) Division of Cardiovascular Pharmacology, Hungarian Academy of Sciences. 3) Institute of Biology and 4) Department of Cardiac Surgery University of Szeged, Szeged, Hungary 5) Department of Physiology, University of Debrecen, Debrecen, Hungary

P-47.

Partial NCX blockade in cardiac muscle: problem or solution?.

Toth A, Acsai K, Farkas A, Nagy N, Prorok J, Papp JG, Varro A.
Department of Pharmacology and Pharmacotherapy, University of Szeged, Hungary

P-48.

Transmural expression of ion channels and transporters in human end-state heart failure.

Jespersen T[1], Soltysinska E[1], Wettwer E[2], Christ T[2], Olesen SP[1], Grunnet M[1].
1) The Danish National Research Foundation Centre for Cardiac Arrhythmia (DARC), Department of Biomedical Sciences, Faculty of Health Sciences, University of Copenhagen, Denmark. 2) Department of Pharmacology and Toxicology, Dresden University of Technology, Germany

P-49.

Gene expression profile of repolarizating ion channels in dilated cardiomiopathy of human hearts.

Szűts V[1], Baczkó I[1], Puskás LG[1], Menesi D[1], Houshmand N[1], Norbert J[1], Virág L[1], Wettwer E[2], Ravens U[2], Papp JG[1], Varró A[1].
1) Department of Pharmacology and Pharmacotheraphy, University of Szeged, Laboratory of Functional Genomics, BRC, HAS, Hungary 2) Department of Pharmacology and Toxicology, University of Technology, Dresden, Germany

P-50.

Effects of ivabradine on the ventricular repolarization in mammalian cardiac muscle.

Kristóf A[1], Koncz I[1], Horváth Z[1], Jost N[1], Farkas S[3], Orosz S[3], Papp JG[1,2], Varró A[1,2], Virág L[2].
1) Department of Pharmacology and Pharmacotherapy, University of Szeged, Szeged, Hungary 2) Department of Medical Chemistry, Medical and Health Science Center, University of Debrecen, Debrecen, Hungary 3) 2nd Department of Internal Medicine and Cardiology Centre, Faculty of Medicine, University of Szeged, Szeged, Hungary

P-51.

Contribution and relative role of the rapid delayed and inward rectifier potassium channels to dog and human ventricular repolarization.

Jost N[1], Virág VL[2], Szűts V[2], Biliczki P[2], Seprényi G[3], Puskás L[4], Papp JG[1,2], Varró A[1,2].
1) Division of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged. 2) Department of Pharmacology & Pharmacotherapy. 3) Department of Medical Biology, University of Szeged, Szeged. 4) Laboratory for Functional Genomics, Biological Research Center, Hungarian Academy of Sciences, Szeged, Hungary

P-52.

High and low affinity drug-binding sites in Kv1.5.

Marzian S, Stansfeld P, Decher N.
Institute of Physiology and Pathophysiology, University of Marburg. Marburg, Germany

P-53.

Effects of endocannabinoids on hKv4.3 channels.

Barana A, Amorós I, Gómez R, Tamargo J, Delpón E, Caballero R.
Department of Pharmacology, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain

P-54.

Effects of endocannabinoids on hKv1.5 channels.

Amorós I, Barana A, Gómez R, Caballero R, Delpón E, Tamargo J.
Department of Pharmacology, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain

P-55.

Characterization of mutations in hERG causing long QT syndrome.

Ottschytsch N, De Block T, Raes AL, Snyders DJ.
Laboratory for Molecular Biophysics, Physiology & Pharmacology, Department of Biomedical Sciences, University of Antwerp, Belgium

P-56.

Attenuation of acute ischaemia-induced arrhythmias by both the gap junction opener rotigaptide and the gap junction blocker carbenoxolone.

Papp R[1], Gönczi M[1], Kovács M[1], Seprényi G[2], Végh A[1].
1) Department of Pharmacology and Pharmacotherapy, University of Szeged, Hungary 2) Department of Medical Biology, University of Szeged, Hungary

P-57.

Kv2.1 membrane corrals: Novel regulators of K+ channel function and trafficking.

Tamkun MM, O'Connell K, Rolig A.
Department of Biomedical Science, Colorado State University, Fort Collins, CO, U.S.A.

P-58.

Herpesvirus-mediated delivery of a genetically encoded fluorescent Ca2+ sensor to adult primary canine cardiomyocytes.

Prorok J[1], Jost N[3], Kovács PP[1], Kristóf AA[3], Tombácz D[2], Tóth J[2], Ördög B[2], Virág L[1], Pappa JG[3], Tóth A[1], Varró A[1], Boldogkıi Z[2].
1) Department of Pharmacology & Pharmacotherapy. 2) Department of Medical Biology, Faculty of Medicine, University of Szeged. 3) Division of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged, Hungary

P-59.

Ventricular tissue slices as representative 3D models of myocardium: A structural and functional validation.

Camelliti P[1], Picton GK[1], Bub G[1], Bussek A[2], Wettwer E[2], Ravens U[2], Kohl P[1].
1) Department of Physiology, Anatomy and Genetics, University of Oxford, United Kingdom 2) Department of Pharmacology and Toxicology, Medical Faculty, Dresden University of Technology, Germany

P-60.

Electrophysiological recordings of acute heart slices from adult mammals.

Bussek A[1], Lohmann H[2], Wettwer E[1], Ravens U[1].
1) Department of Pharmacology and Toxicology, Medical Faculty, Dresden University of Technology, Dresden, Germany 2) Lohmann Neuropharmacological Consulting, Castrop-Rauxel, Germany

P-61.

In-vivo conduction velocity and cellular Na-currents in human chronic atrial fibrillation.

Christ T, Endig S, Rauwolf T, Knauth M, Wettwer E, Ravens U.
Department of Pharmacology and Toxicology, Medical Faculty, Dresden University of Technology, Germany

P-62.

Triggered electrical activity in the old mouse sinoatrial node.

Gonotkov MA, Golovko VA.

Institute of Physiology, Komi Sceince Centre, the Urals Branch of Academy of Sciences RAS, Syktyvkar, Russia

P-63.

Initiation and propagation of calcium sparks in a fire-diffuse-fire model of cardiac myocyte with allosterically gating ryanodine receptors.

Zahradnikova A[1], Valent I[1], Cocherova E[1], Parulek J[1], Pavelkova J[1], Fernandez-Velasco M[2], Gomez AM[2], Richard S[2], Zahradnik I[1].

1) Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, Bratislava, Slovakia 2) INSERM U637, Montpellier, France

P-64.

DHPR-RyR coupling fidelity in cardiac myocytes.

Zahradnikova Jr A, Polakova E, Pavelkova J, Zahradnik I, Zahradnikova A.

Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, Bratislava, Slovakia

P-65.

Description of local calcium release triggering by DHPR channels.

Zahradnik I, Polakova E, Zahradnikova Jr A, Pavelkova J, Zahradnikova A.

Institute of Molecular Physiology and Genetics, Slovak Academy of Sciences, Bratislava, Slovakia

P-66.

Inhibition of neutral sphingomyelinase prevents hypoxia-induced Kv channel inhibition in pulmonary artery smooth muscle cells.

Moral-Sanz J, Cogolludo A, Frazziano G, Moreno L, Menéndez C, Pérez-Vizcaíno F.

Department of Pharmacology, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain

P-67.

The structural basis of chloroquine block of the inward rectifier Kir2.1 channel.

Rodríguez-Menchaca AA[1], Lopez-Izquierdo A[1], Navarro-Polanco RA[1], Ferrer-Villada T[2], Rupp J[2], Sachse FB[2,3], Tristani-Firouzi M[2,4], Sánchez-Chapula JA[1].

1) Unidad de Investigación "Carlos Méndez" del Centro Universitario de Investigaciones Biomédicas de la Universidad de Colima, Mexico. 2) Nora Eccles Harrison Cardiovascular Research and Training Institute, University of Utah, Salt Lake City, Utah, U.S.A. 3) Bioengineering Department, University of Utah, Salt Lake City, Utah, U.S.A. 4) Division of Pediatric Cardiology, University of Utah, Salt Lake City, Utah, U.S.A.

P-68.

Diminished response to isoproterenol and increased pacing rate in newborn human ventricle.

Wiegerinck RF[1,2], Ding G[1], Cojoc A[1], Zeidenweber CM[1], Kanter KR[2], Kirshbom PM[2], Kogon BE[2], Joyner RW[2], Wagner MB[2].

1) Experimental Cardiology Group, Center for Heart Failure Research, Academic Medical Center, Amsterdam, the Netherlands 2) Todd Franklin Cardiac Research Laboratory, Department of Pediatrics, Emory University School of Medicine, Atlanta, Georgia, U.S.A.

P-69.

Identification of putative interacting partners of DPP10 intracellular domain through a yeast two-hybrid screening.

Cotella D, Rizzi E, Radicke S, Ravens U, Wettwer E, Sblattero D, Santoro C.
Department of Medical Science Applied Biology Laboratory, University of Eastern Piemont, Italy; Department of Pharmacology and Toxicology, Dresden University of Technology, Germany

P-70.

Identification of residues of the hHCN4 channel involved in the binding of the heart rate reducing agent ivabradine.

Bucchi A, Micheloni S, Locanto E, Milanesi R, Nardini M, Bolognesi M, Baruscotti M, DiFrancesco D.
Univ. of Milano, Dept. Biomolecular Sciences and Biotechnology, Italy

P-71.

A caveolin-binding motif in the N-terminus of HCN4 controls channel properties.

Barbuti A, Milanesi R, Mazzocchi N, DiFrancesco D.
Univ. of Milano, Dept. Biomolecular Sciences and Biotechnology, Italy

P-72.

Reduced calmodulin expression accelerates transient outward potassium current inactivation in diabetic rat heart.

Gallego M, Alday A, Urrutia J, Casis O.
Department of Physiology. Universidad del País Vasco, Bilbao, Spain

P-73.

An in vitro method for detecting potential proarrhythmic properties of cardiomyocytes grown on microelectrode arrays.

Bryant S, Wyllie C, Palmer R, Heal R, Demmon J, Nicol S.
Vivomedica, Sittingbourne, United Kingdom

P-74.

Simulating cardiac ischemia: a 2D computer model.

Seidel T, Dhein S.
Heart Centre Leipzig, Germany

P-75.

Left ventricular pre-excitation in Tbx2 deficient mice.

Boukens BJD, Aanhaanen WTJ, Wakker V, Moorman AFM, Coronel R, Christoffels VM.
Heart Failure Research Center, Amsterdam, The Netherlands

GENERAL INFORMATION

BADGE

Participants are requested to wear their badge at all times during the meeting.

ORAL PRESENTATIONS

- The oral sessions will be held in Lecture Theatre on the ground floor of CSIC.
- Presentations will be in MS PowerPoint, using the computer in the auditorium. The file of the presentation should be provided at least 1 hour before the session, on CD or on USB key disk.

TIPS:

- If you use special fonts or characters please save the presentation with the option "save with embedded fonts"
- If you use special effects or animations, use the "pack&go" feature (and test your presentation on a computer different from the one on which you have made the presentation to make sure everything is available)

POSTER PRESENTATIONS

- Poster sessions will be located in The Claustro of the CSIC (see map)
- The dimensions of the poster board are: 180 cm high by 90 cm wide. Please do not exceed this format when prepare your posters. Also take into account the usual recommendations for posters (do not overload with text, use sufficiently large character & symbol size, etc) Posters will be mounted portrait.
- Poster should be mounted after your arrival and will remain exhibited throughout the whole meeting. Mounting tape will be provided by the staff. Authors are responsible for setting up and removing their posters by themselves. Mount your poster on the board according to the number in the program. Posters left behind will not be stored.

POSTER REMOVAL

- 20th September (Saturday) 14:00.

VENUE

- Consejo Superior de Investigaciones Científicas
  C/ Serrano 113-117 • 28006 Madrid

REGISTRATION/HOSPITALITY DESK

You should collect your meeting documentation (congress kit, final program, badge, payment receipts) at the registration desk as soon as possible after your arrival. The

staff at the registration desk will be pleased to assist you with all your enquiries. The registration desk is located at the Congress venue and will be staffed during the following hours:

- Thursday 18th September 16:00 • 20:00
- Friday 19th September 10:00 • 13:00

REGISTRATION FEES (IN EURO)

Early registration (before 30th May 2008): 150,00 €
Late registration (after 30th May 2008): 180,00 €

The registration fee includes: Access to scientific sessions, Congress material (congress kit, badge, final program), Welcome Reception (18th September, evening), Congress Dinner (19th September, evening), Coffee breaks, Lunch (19th September) and Lunch (20th September)

COFFEE

Coffee, tea and orange juice will be available in the lobby during the breaks.

LUNCHES

Lunch is included in the registration fee and will be offered on 19th and 20th September in the Congress venue.

WELCOME RECEPTION (THURSDAY 18TH SEPTEMBER, 21:00 HOURS)

The Welcome Reception will be held in the Thyssen-Bornemisza Museum with a guided visit followed by a cocktail (Paseo del Prado, 8 • 28014 Madrid)

CONGRESS DINNER (19TH SEPTEMBER 2008, 21:00 HOURS)

The Congress Dinner will be held in the Palacio de Linares, Plaza de la Cibeles, 2 • 28014 Madrid. This Palace is, from 1992 the venue of Casa de América, important foundation for the promotion and cultural exchange of cultural and artistic activities. It is held in the Paseo del Prado - Paseo de Recoletos axis, which is the heart of Madrid. It maintains the atmosphere of the epoch in all the rooms. It is recommended "semi-formal" dress.

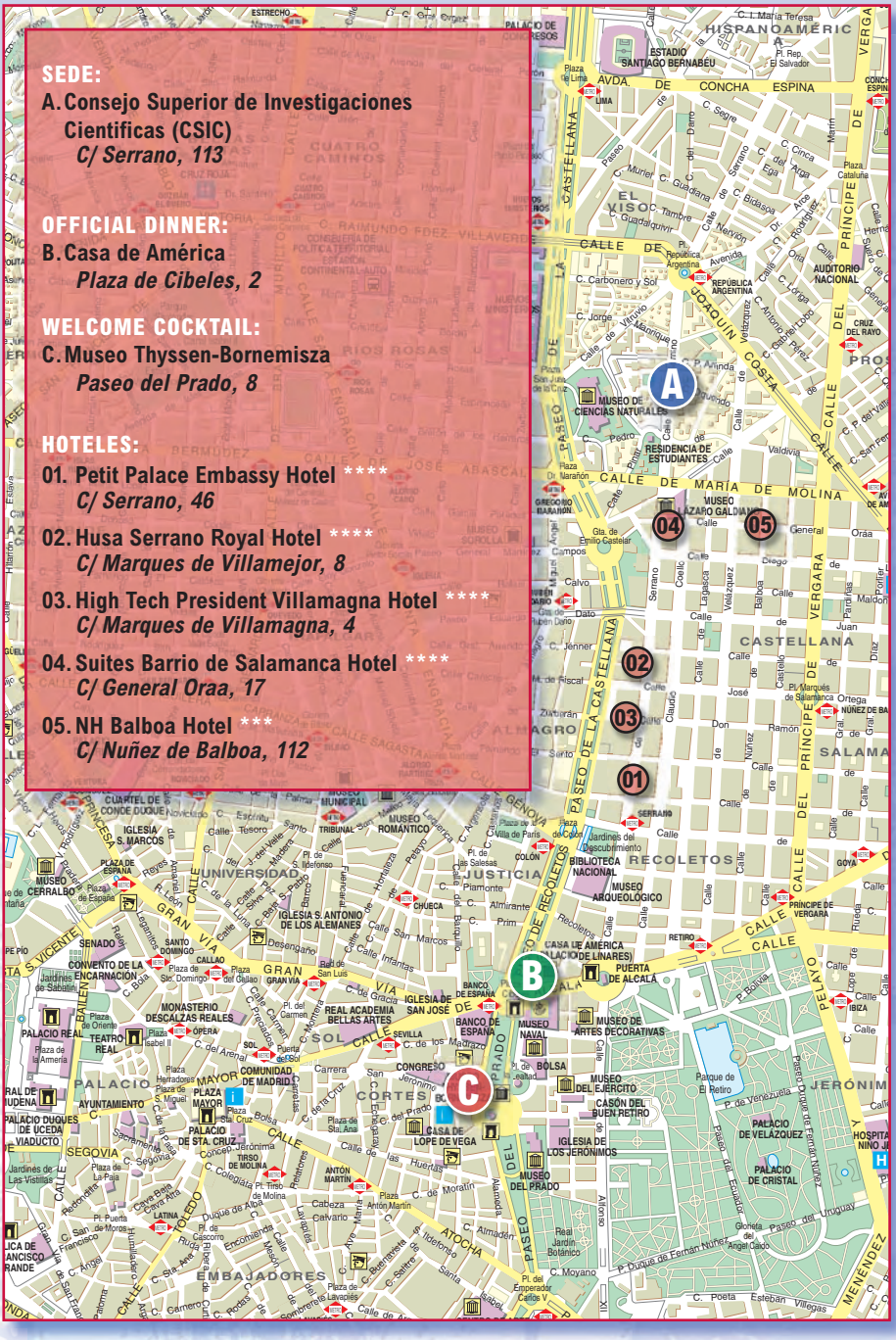
INSURANCE

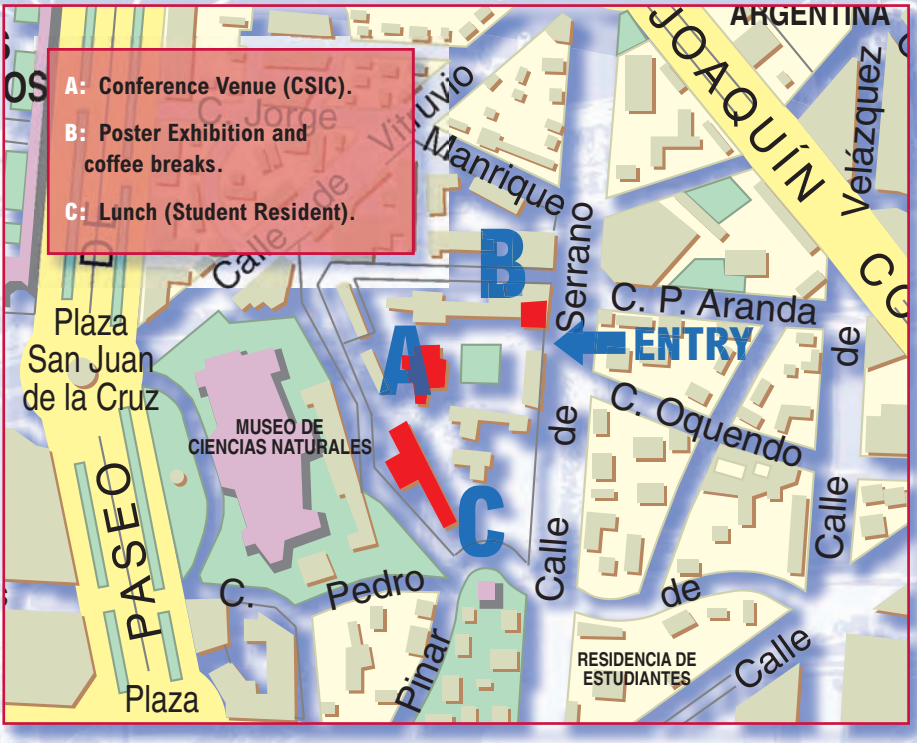
The registration fee does not include any type of insurance. The Organising Committee does not accept liability for personal accidents, losses or damages.

CANCELLATION POLICY

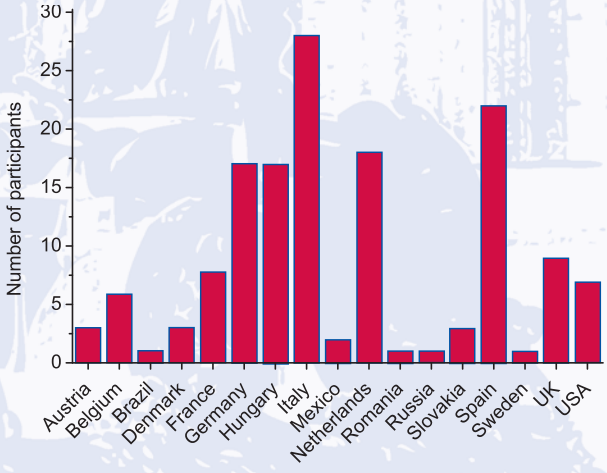
No refund is available after 2nd September 2008.

MAP VENUE, HOTELS AND DINNER





BREAKDOWN BY COUNTRY



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