Symposium Director: Francisco Fernández – Avilés

PRELIMINARY PROGRAM

MADRID. SPAIN, MAY 29th - 30th 2014
AULA MAGNA. PABELLÓN DOCENTE. HOSPITAL GENERAL UNIVERSITARIO GREGORIO MARAÑÓN.
C/ IBIZA, 43. 28007 MADRID
THURSDAY, 29th May 2014

7.45 – 8.30  REGISTRATION

8.30 – 9.00  WELCOMING

9.00 – 10.00 OPENING LECTURES

Frontiers of cardiac regeneration. Is there a role in advanced heart disease?

9.00 – 9.20  The Biological point of view.
Stefanie Dimmeler  (Frankfurt, Germany)

9.20 – 9.40  The Histopathological point of view
Charles E. Murry  (Washington, USA)

9.40 – 10.00 The Clinical point of view
From bench to bedside: a clinical perspective of the 2nd generation of clinical trials
Bernard Gersh  (Rochester, USA)

10.00 – 12.00 WHAT’S NEW IN STEM CELL THERAPY FOR CARDIAC REPAIR?

10.00 – 10.20  Types of Cells – Only the lonely
Bernardo Nadal-Ginard  (Liverpool, UK)

10.20 – 10.40  Types of Cells – Not only the lonely
Joshua Hare  (Miami, USA)

10.40 – 11.00  Mechanisms of action. Still exogenous cell replacement or again paracrine modulation?
André Terzic  (Rochester, USA)

11.00 – 11.20  Delivery and tracking. Finding a well-hidden needle in the haystack
Javier Bermejo  (Madrid, Spain)

11.20 – 11.40  Electromechanical coupling for real functional regeneration. The necessary contribution of electrophysiology.
Angel Arenal  (Madrid, Spain)

11.40 – 12.00  Panel Discussion

12.00 – 12.30  Coffee break
12.30 – 14.45  LATE BREAKING HEART TISSUE ENGINEERING

12.30 – 12.50  Replacement of extracellular architecture by artificial tissues  
*Juan Carlos Chachques*  
(Paris, France)

12.50 – 13.10  Role of cadaveric scaffolds in advanced cardiac disease  
*Doris Taylor*  
(Houston, USA)

13.10 – 13.30  Can intramyocardial delivery repair extracellular structure?  
*Jerome Roncalli*  
(Toulouse, France)

13.30 – 13.50  Role of electrophysiology in the production of bioartificial myocardium  
*Andreu M. Climent*  
(Madrid, Spain)

13.50 – 14.10  Enhancing retention and efficacy of cardiosphere-derived cells administered after myocardial infarction using a hyaluronan-gelatin hydrogel  
*Rachel Ruckdeschel Smith*  
(Los Angeles, USA)

14.10 – 14.30  The long and winding road to building a biological valve  
*Amir Lerman*  
(Rochester, USA)

14.30 – 14.45  Panel Discussion

14.45 – 15.30  LUNCH AND POSTER EXHIBITION

| Chairs and jury: | Philippe Menasche  
*Paris, France*  
Felipe Prosper  
*Pamplona, Spain* |

In this “Poster Exhibition” research teams involved in the topic of the Symposium will have the opportunity of presenting selected parts of their work to the audience.

The Poster Review Committee will select which the best posters of the session are. At the end of the session, the verdict will be communicated. The winners of the Posters Awards will have to present their work (oral presentation) the following day in the morning, in the session named “Best Poster Presentation”, when they will receive their prize.

For more information regarding Poster Exhibition and Poster Awards, please contact us via e-mail at posters@cardiovascularcelltherapy.com
15.30 – 17.30  DISCOVERIES AND INVENTIONS

15.30 – 15.50  Telomeric research and its role protecting myocardium.
             Maria Blasco  (Madrid, Spain)

15.50 – 16.10  New advances in cardiovascular sealing and repair.
             Pedro J. del Nido
             Jeffery M. Karp  (Boston, USA)

16.10 – 16.30  Genetic manipulation of cells to enhance cardiac repair
             Roger Hajjar  (New York, USA)

16.30 – 16.50  Perfusable microvessel networks and perfusion platforms for engineered tissues
             Milica Radisic  (Toronto, Canada)

16.50 – 17.10  MicroRNAs in cardiac development and regeneration
             Enzo R. Porrello  (Queensland, Australia)

17.10 – 17.30  Exosomes and cardiac repair after myocardial infarction.
             Douglas W. Losordo  (Chicago, USA)

17.30 – 19.30  EDUCATIONAL WORKSHOPS

2. Translational application of tissue engineering advances.
3. Cell production and delivery.
EDUCATIONAL WORKSHOP 1  (ROOM 1)

Clinical research in stem cell therapy. Advances, barriers and pitfalls

**Coordinators**  
Bernard Gersh  
Ricardo Sanz Ruiz

**Pannel discussants**  
Eduardo Marban  
Emerson Perin  
Andreas Zeiher  
Javier Bermejo  
Douglas W. Losordo

<table>
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| 17.30 – 17.40 | **Endpoints. Only mortality? The role of quality of life and functional status**  
Bernard Gersh (Rochester, USA) |
| 17.40 – 18.00 | Pannel Discussion                                                       |
| 18.00 – 18.10 | **Myocardial damage measurement. Facts and illusions on imaging**  
Raquel Yotti (Madrid, Spain) |
| 18.10 – 18.30 | Pannel Discussion                                                       |
| 18.30 – 18.40 | **The neverending problem of recruitment**  
Thimothy Henry (Los Angeles, USA) |
| 18.40 – 19.00 | Pannel Discussion                                                       |
| 19.00 – 19.10 | **Regulatory**  
Sol Ruiz (Madrid, Spain) |
| 19.10 – 19.30 | Pannel Discussion                                                       |
| 19.30 – 19.40 | **Role of GCSF after AMI. STEM-AMI**  
G. Pompilio (Milan, Italy) |
| 19.40 – 20.00 | Pannel Discussion                                                       |
EDUCATIONAL WORKSHOP 2  (ROOM 2)

Application of tissue engineering discoveries. Opportunities and impediments

Coordinators  
Doris A. Taylor  
Pedro L. Sanchez

Pannel Discussants  
Angel Arenal  
Amir Lerman  
Joseph Consiglio

17.30 – 17.40  Sequence and integration of experimental models  
Andreu M. Climent  
(Madrid, Spain)

17.40 – 18.00  Pannel Discussion

18.00 – 18.10  The problem of cell-to-cell and cell-to-tissue interaction. Role of electrophisiology in tissue engineering  
Felipe Atienza  
(Madrid, Spain)

18.10 – 18.30  Pannel Discussion

18.30 – 18.40  Artificial vs bioartificial matrixes: homo or Xeno Scaffolds?  
Doris A. Taylor  
(Texas, USA)

18.40 – 19.00  Pannel Discussion
EDUCATIONAL WORKSHOP 3  (ROOM 3)

Cell production for clinical trials

17.30 – 17.40  Cardiopoietic mesenchymal stem cells for treatment of chronic advanced ischemic heart failure

17.40 – 18.00  Pannel Discussion

18.00 – 18.10  Biological point of view of combination human cardiac stem cells and bone marrow mesenchymal stem cells
Joshua M. Hare  (Miami, USA)

18.10 – 18.30  Pannel Discussion

18.30 – 18.40  Cardiac stem cell
Luis R. Borlado  (Madrid, Spain)

18.40 – 19.00  Pannel Discussion

19.00 – 19.10  Cell senescence in the therapeutic potential of human mesenchymal stem cells
Juan Carlos Sepulveda  (Madrid, Spain)

19.10 – 19.30  Pannel Discussion
FRIDAY, 30th May 2014

9:00 – 9.30  BEST POSTERS PRESENTATION

9.30 – 11.00  RECENT CONTRIBUTIONS PRESENTED BY YOUNG INVESTIGATORS

11.00 – 11.30  Coffee Break

11.30 – 12.30  HOT TOPICS OF THE YEAR

11.30– 11.50)  NON CARDIOVASCULAR TOPICS OF THE YEAR
Regeneration and experimental orthotopic transplantation of a bioengineered kidney
Harald C Ott  (Boston, USA)

11.50 – 12.10  CARDIOVASCULAR TOPICS OF THE YEAR
Total cardiac replacement by an artificial biocompatible heart
Alain Carpentier  (Paris, France)

12.30 – 14.00  LATE BREAKING CLINICAL TRIALS

12.30 – 12.45  Cardiopoietic stem cell therapy in heart failure: The C-CURE multicentre randomized trial with lineage-specified biologics
Joseph Bartunek  (Aalst, Belgium)

12.45 – 13.00  Transendocardial mesenchymal stem cells and mononuclear bone marrow cells for ischemic cardiomyopathy: The TAC-HFT randomized trial.
Joshua Hare  (Miami, USA)

13.00 – 13.15  Intracoronary infusion of bone marrow-derived selected CD34+CXCR4+ cells and non-selected mononuclear cells in patients with acute STEMI and reduced left ventricular ejection fraction: The REGENT Trial. Five years follow-up
Michal Tendera  (Katowice, Poland)
Effect of shock wave-facilitated intracoronary cell therapy on LVEF in patients with chronic heart failure: the CELLWAVE randomized clinical trial
Andreas Zeiher (Frankfurt, Germany)

Impact of intracoronary bone marrow cell therapy on left ventricular function in the Setting of ST-segment elevation myocardial infarction: a collaborative metaanalysis
Ronak Delewi (Amsterdam, The Netherlands)

Long term survival in patients with refractory angina
Thymothy D. Henry (Los Angeles, USA)

14.00 – 15.00 CLOSING SESSION
FIRST MADRID CARDIAC REGENERATION AWARDS.
MASTER LECTURES GIVEN BY THE AWARD

15.00 – 15.15 ADJOURN
Francisco Fdez-Aviles (Madrid, Spain)
DIRECTION

Francisco Fernández-Avilés  
Servicio de Cardiología  
Instituto de Investigación Sanitaria Gregorio Marañón (IISGM)  
Hospital General Universitario Gregorio Marañón (Madrid, Spain)

CO-DIRECTION

Mª Eugenia Fernández Santos  
Instituto de Investigación Sanitaria Gregorio Marañón  
Hospital General Universitario Gregorio Marañón (Madrid, Spain)

Bernard Gersh  
Mayo Clinic (Rochester, USA)

John F. Martin  
Centre for Cardiovascular Biology & Medicine (London, United Kingdom)

José Alberto San Román  
Hospital Clínico-Universitario de Valladolid (Valladolid, Spain)

Pedro L. Sánchez  
Hospital Clínico Universitario de Salamanca (Salamanca, Spain)

Ricardo Sanz Ruiz  
Instituto de Investigación Sanitaria Gregorio Marañón  
Hospital General Universitario Gregorio Marañón (Madrid, Spain)

Doris A. Taylor  
Texas Heart Institute  
(Houston, USA)

Andreas W. Zeiher  
University of Frankfurt (Frankfurt, Germany)
TECHNICAL DIRECTION
Ana Fernández Baza
Instituto de Investigación Sanitaria Gregorio Marañón (IISGM)
Servicio de Cardiología
Hospital General Universitario Gregorio Marañón

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ORGANIZATION
- Instituto de Investigación Sanitaria Hospital Gregorio Marañón.
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- Red Temática de Investigación Cardiovascular del Instituto de Salud Carlos III (RIC)
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- Task Force on Stem Cell Regeneration of the Heart (European Society of Cardiology)
This symposium is aimed at both medical and non-medical scientists interested in the study and application of stem cell therapy and other biotechnological advances for the prevention and treatment of cardiovascular failure. For this reason the audience comprises:

a. Preclinical researchers from all areas wishing to deepen their knowledge of cardiovascular biotechnological developments with therapeutic potential.

b. Doctors specialising in the care of patients suffering from cardiovascular diseases, and who are interested in finding out about and discussing the current state of affairs and the future prospects for the application of these new therapeutic methods.

c. Doctors involved in interventions dedicated to cardiovascular pathology and who are interested in the results and perspectives of gene vehiculization techniques, the stimulation of endogenous progenitors, cell transplant or electromechanical helps to fight cardiovascular disease.

d. Medical or no medical professionals interested in the development of units and networks aimed at the translation of cardiovascular knowledge from bench to bedside and vice versa.

e. Medical or no medical professionals interested in envisaging the opportunities for competition of biotechnology in the cardiovascular field

At the end of the conference those present will have acquired the following skills:

1. Knowledge and ability to discuss the latest advances in the role of progenitor cells in the integrity of the cardiovascular system of a healthy individual.

2. Knowledge and ability to discuss the latest experimental advances in the renewal and repair capacity of the damaged cardiovascular structure via the transplant of adult or embryonic stem cells or the stimulation of endogenous progenitors.

3. Knowledge and ability to objectively debate the current state of feasibility, safety and efficacy with regards to the clinical application of cell therapy and other new biotechnological treatments.

4. Knowledge and ability to debate objectively on the efficiency of these types of treatment in patients with acute or chronic cardiovascular diseases.

5. Ability to predict the possibilities of scientific and professional attitude with regards to offering these therapeutic methods.

6. Ability to evaluate and decide one’s own ability to participate in the application of these therapies for healthcare, clinical, and preclinical purposes.

7. Ability to identify those institutions and groups with the highest performance capabilities in these fields, and be able to establish contacts for educational, scientific, and healthcare purposes.
· Spanish Society of Cardiology. Continuing Medical Education Accreditation Program. Activity accredited by the Spanish Society of Cardiology

· EBAC (European Board for Accreditation in Cardiology). Activity accredited by the European Board for Accreditation in Cardiology

· Comisión de Formación Continuada. Sistema Nacional de Salud. Activity accredited
MEETING VENUE
C/ Ibiza, 43. 28007 Madrid, Spain

DATE
May 29th and 30th, 2014

OFFICIAL LANGUAGES
English and Spanish (simultaneous translation will be available)

TECHNICAL SECRETARIAT
Viajes Orbíazul
C/ Alonso Pesquera, 2
47002 Valladolid
Tf. 00 34 983 30 91 92
Fx. 00 34 983 29 53 51
housing@cardiovascularcelltherapy.com
info@cardiovascularcelltherapy.com
The website [www.cardiovascularcelltherapy.com](http://www.cardiovascularcelltherapy.com) is a virtual place which contains all the information related to this Symposium and its previous editions.

It is possible through this web-site to access the scientific program, to register and to reserve accommodation.

It is also a priority for this web site to offer updated information about Stem Cell Therapy for Cardiovascular Diseases, so appropriate access to related sites has been created.

You can also join us on [Facebook](https://www.facebook.com) and [Twitter](https://twitter.com).

@cardiostemcell

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TECHNICAL DIRECTION
Ana Fernández Baza
Hospital General Universitario Gregorio Marañón
C/ Doctor Esquerdo, 46. 28007 Madrid
T. 00 34 91 426 58 82 / F. 00 34 91 586 82 76
anafdezba@cardiovascularcelltherapy.com

TECHNICAL SECRETARIAT
Viajes Orbiazul
C/ Alonso Pesquera 2. 47002 Valladolid
T. 00 34 983 30 91 22 / F. 00 34 983 29 53 51
housing@cardiovascularcelltherapy.com