

# 12<sup>th</sup> INTERNATIONAL SYMPOSIUM ON STEM CELL THERAPY & CARDIOVASCULAR INNOVATIONS



[www.cardiovascularcelltherapy.com](http://www.cardiovascularcelltherapy.com)

Symposium Director: Francisco Fernández – Avilés

PRELIMINARY SCIENTIFIC AGENDA



MADRID. SPAIN, MAY 28<sup>th</sup> - 29<sup>th</sup> 2015

AULA MAGNA. PABELLÓN DOCENTE. HOSPITAL GENERAL UNIVERSITARIO GREGORIO MARAÑÓN.  
C/ IBIZA, 43. 28007 MADRID



# 12<sup>th</sup> INTERNATIONAL SYMPOSIUM & ON STEM CELL THERAPY CARDIOVASCULAR INNOVATIONS

[www.cardiovascularcelltherapy.com](http://www.cardiovascularcelltherapy.com)

1

SCIENTIFIC AGENDA

2

ORGANIZATION

3

EDUCATIONAL OBJECTIVES

4

ACCREDITATION

5

GENERAL INFORMATION

6

WEBSITE

7

FACULTY

8

COLLABORATION AND SPONSORSHIP



[www.cardiovascularcelltherapy.com](http://www.cardiovascularcelltherapy.com)



# THURSDAY, 28<sup>th</sup> May 2015

7.45 – 8.30 REGISTRATION

8.30 – 9.00 WELCOMING

9.00 – 10.00 OPENING LECTURES

## CHALLENGES IN REGENERATIVE CARDIOVASCULAR MEDICINE

**Chairs:** Andreas Zeiher (Frankfurt, Germany)  
John Martin (London, UK)

9.00 - 9.20 **Learning from development**

Nadia Rosenthal (Melbourne, Australia)

9.20 - 9.40 **Challenging targets for cardiac stem cell therapy. The cell, the niche, anything else?**

André Terzic (Rochester, USA)

9.40 - 10.00 **Is there a role for cardiac regeneration in advanced heart disease? Overcoming frontiers to move forward.**

Valentin Fuster (New York, USA)

10.00 – 10.30 **Coffee Break and Poster Exhibition**

10.30 – 12.00 **CARDIOVASCULAR REGENERATIVE MEDICINE. CRISIS, WHAT CRISIS?**

**Chairs:** José Luís de la Serna (El Mundo Salud) (Madrid, Spain)  
Cristina Garmendia (Genetrix) (Madrid, Spain)

**Panel Discussants:** Timothy Henry (Los Angeles, USA)  
Dominique Charron (Paris, France)  
Stefanie Dimmeler (Frankfurt, Germany)  
André Terzic (Rochester, USA)

10.30 (12') **Importance of the cells. What are we using?**

Piero Anversa (Boston, USA)

10.42 (12') **Can we improve the regenerative power of transplanted or native cells? Proteins, genes, what else?**

Atta Behfar (Rochester, USA)

10.54 (12') **Local milieu in cardiac regeneration. Barriers and opportunities in acute and chronic settings**

Philippe Menasché (Paris, France)

11.06 (12') **Lights and shadows of clinical trials. Should we continue? In which setting? How?**

Bernard Gersh (Rochester, USA)

11.18 (12') **Cell based therapies to prevent and cure heart failure. More than an adventure?**

Douglas W. Losordo (Boston, USA)

11.30 (12') **Cardiac regenerative medicine beyond scientists and clinicians. Are we doing well?**

John Martin (London, UK)

11.42 – 12.00 **Panel Discussion**

THURSDAY, 28<sup>th</sup> May 2015

## 12.00 – 12.45 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](mailto:posters@cardiovascularcelltherapy.com)

## 12.45 – 14.45 WHAT’S NEW IN STEM CELL THERAPY FOR CARDIAC REPAIR?

---

**Chairs :** Timothy Henry (Los Angeles, USA)  
André Terzic (Rochester, USA)

**Panel Discussants:** Roberto Fdez-Viña (Buenos Aires, Argentina)  
Kai C. Wollert (Germany)  
Stefan Janssens (Leuven, Germany)  
Jerome Roncalli (Toulouse, France)

- 12.45 (12’) **Cardiac valve repair. Beyond myocardium.**  
Amir Lerman (Rochester, USA)
- 12.57 (12’) **What’s new in induced pluripotent stem cells.**  
Eric A. Adler (San Diego, USA)
- 13.09 (12’) **Combinations of stem cells. Which ones to choose?**  
Joshua Hare (Miami, USA)
- 13.21 (12’) **Role of cardiopoiesis in the second-generation stem cells’ era.**  
Almudena Martínez-Fernández (Rochester, USA)
- 13.33 (12’) **Cell based therapies: Novel developments in the arena of delivery strategy**  
Steven Chamuleau (Utrecht, The Netherlands)
- 13.45 (12’) **Stemless biological therapies for cardiac repair.**  
Stefanie Dimmeler (Frankfurt, Germany)
- 13.57 (12’) **Latest clinical news: the Dream-HF experience**  
Emerson Perin (Houston, USA)
- 14.09 (12’) **Future clinical news: Trials in perspective**  
Thomas J. Povsic (Durham, USA)
- 14.21 – 14.45 **Panel Discussion**

**14.45 – 15.15 Coffee break and poster exhibition****15.15 – 15.25 Posters Award -** Winners communication

**Chairs:** *Philippe Menasché* (Paris, France)  
*Felipe Prosper* (Pamplona, Spain)

**15.25 – 17.35 THIS YEAR WE DEBATE**

---

**Chairs:** *Bernard Gesh* (Rochester, USA)  
*Pedro Luís Sánchez* (Salamanca, Spain)

**Panel discussants:** *Andreas Zeiher* (Frankfurt, Germany)  
*Timothy Henry* (Los Angeles, USA)  
*Philippe Menasché* (Paris, France)  
*Andreu Climent* (Madrid, Spain)  
*André Terzic* (Rochester, USA)

**15.25-16.16 The Clinical Debate: Why metanalyses are contradictory**

15.25 (12') Meta-analyses and systematic reviews' results on hold. Factual discrepancies.  
*Alexandra N. Nowbar* (London, UK)

15.37 (12') How individual patient data change messages. The ACCRUE experience  
*Maryann Gyongyosi* (Vienna, Austria)

15.49 (12') Meta-analyses and systematic reviews' results are valid and still offering evidences.  
*Enca Martí Rendon* (Oxford, UK)

16.01 - 16.16 Discussion

**16.16-16.55 How to improve: the cardiac stem cells debate**

16.16 (12') Native and enhanced CSC are the real workhorse cells.  
*Mark A. Sussman.* (San Diego, USA)

16.28 (12') Do we really know what CSC are and how to use them?  
*Bernardo Nadal-Ginard* (London, UK)

16.40 - 16.55 Discussion

**16.55-17.34 How to improve: The bioengineering debate: matrixes and scaffolds.**

16.55 (12') Bioartificial matrixes. Available and versatile.  
*Felipe Prosper* (Pamplona, Spain)

17.07 (12') Cadaveric matrixes. Native myocardial architecture is mandatory.  
*Doris Taylor* (Houston, USA)

17.19 - 17.34 Discussion





# FRIDAY, 29<sup>th</sup> May 2015

## 9.00 – 9.30 BEST POSTERS PRESENTATION

---

**Chairs:** Philippe Menasche (Paris, France)  
Felipe Prosper (Pamplona, Spain)

## 9.30 – 10.30 RECENT CONTRIBUTIONS PRESENTED BY YOUNG INVESTIGATORS

---

**Chairs:** Philippe Menasche (Paris, France)  
Felipe Prosper (Pamplona, Spain)

**Panel discussants:** David G. Dorado (Barcelona, Spain)  
Javier Bermejo (Madrid, Spain)  
Joshua Hare (Miami, USA)  
Stefan Janssens (Leuven, Belgium)

**9.30 – 9.40** **Cardioprotection by telomerase treatment**  
Christian Bar (Maria Blasco's group. Madrid, Spain)

**9.40 – 9.50** **Natura killer cell crosstalk with allogenic human cardiac-derived stem/progenitor cells control persistence**  
Reem Al Daccak (Dominique Charron's group. Paris, France)

**9.50 – 10.00** **Myocardial infarct scar is formed by interacting resident epicardial-derived fibroblasts and recruited bone marrow cells**  
Adrian Ruiz Villalba (Felipe Prosper's group. Pamplona, Spain)

**10.00 – 10.10** **Novel CMR based techniques to detect cardiac fibrosis**  
Johannes M.I.H. Gho (Steven Chamuleau's group. Utrecht, The Netherlands)

**10.10 – 10.30** **Panel Discussion**

**10.30- 11.00** **Coffee Break**

FRIDAY, 29<sup>th</sup> May 2015

**11.00 – 12.50 DISCOVERIES AND INVENTIONS**

---

**Chairs:** *Dominique Charron* (Paris, France)  
*Alberto San Román* (Valladolid, Spain)

**Panel discussants:** *Juan Carlos Chachques* (Paris, France)  
*Raquel Yotti* (Madrid, Spain)  
*Angel Arenal* (Madrid, Spain)  
*Giulio Pompilio* (Milan, Italy)

**11.00 – 11.45 Genes and cells to fight against pulmonary hypertension.**  
*Duncan Stewart* (Ottawa, Canada)

**11.45 – 12.00 High-density optical mapping in a monolayer of iPSC-derived cardiomyocytes as a tool for understanding arrhythmic disorders.**  
*Andreu M. Climent* (Madrid, Spain)

**12.00 – 12.15 Patient-specific stem cell manufacturing for the development of dedicated cardiovascular drugs.**  
*Joseph Wu* (Los Angeles, USA)

**12.15 – 12.30 Bioprosthetic Carmat Total Artificial Heart: from a dream to the first-in-human implantation.**  
*Christian Latremouille* (Paris, France)

**12.30 – 12.50 Panel Discussion**

**12.50– 13.30 Break**

**13.30 – 13.50 SPECIAL LECTURE**

---

**Chairs:** *Rafael Matesanz* (Madrid, Spain)  
*Arturo Fdez-Cruz* (Madrid, Spain)

**Interspecies genetic manipulation for organ manufacturing. What about the heart?**  
*Juan Carlos Izpisua* (La Jolla, USA)

**13.50– 14.20 CLOSING SESSION.  
SECOND MADRID CARDIAC REGENERATION AWARDS**

---

**Chairs:** *John Martin* (London, UK)  
*Rafael Matesanz* (Madrid, Spain)

**14.20 ADJOURN**

---

*Francisco Fernández-Avilés* (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

### **M<sup>a</sup> 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*

## INTERNATIONAL SCIENTIFIC ADVISORY BOARD

Jozef Bartunek (Aalst, Belgium)	John Martin (London, United Kingdom)
Nabil Dib (San Diego, USA)	Philippe Menasche (Paris, France)
Stefanie Dimmeler (Frankfurt, Germany)	Bernardo Nadal-Ginard (London UK)
Valentín Fuster (New York, USA)	Emerson Perin (Houston, USA)
Bernard Gersh (Rochester, USA)	Doris Taylor (Houston, USA)
Juan Carlos Izpisua (La Jolla, USA)	William Wijns (Aalst, Belgium)
Stefan Janssens (Leuven, Belgium)	James T. Willerson (Houston, USA)
Anthony Mathur (London, United Kingdom)	

## EXECUTIVE LOCAL COMMITTEE

Lucía Alvaredo Olmos  
*Instituto de Investigación Sanitaria Gregorio Marañón (IISGM) - Hospital G. Universitario Gregorio Marañón, Madrid*

Carmen Glez. Morante  
*Instituto de Investigación Sanitaria Gregorio Marañón (IISGM) - Hospital G. Universitario Gregorio Marañón, Madrid*

Enrique Gutiérrez  
*Instituto de Investigación Sanitaria Gregorio Marañón (IISGM) - Hospital G. Universitario Gregorio Marañón, Madrid*

M<sup>a</sup> Eugenia Vázquez  
*Instituto de Investigación Sanitaria Gregorio Marañón (IISGM) - Hospital G. Universitario Gregorio Marañón, Madrid*

Adolfo Villa  
*Instituto de Investigación Sanitaria Gregorio Marañón (IISGM) - Hospital G. Universitario Gregorio Marañón, Madrid*

## ORGANIZATION

- **Instituto de Investigación Sanitaria Hospital Gregorio Marañón.**
- **Servicio de Cardiología. Hospital General Universitario Gregorio Marañón, Madrid.**
- **Red Temática de Investigación Cardiovascular del Instituto de Salud Carlos III (RIC)**
- **Red Temática de Terapia Celular del Instituto de Salud Carlos III (TERCEL)**
- **Grupo de Terapia Celular Aplicada al Miocardio (TECAM, Hospital General Universitario Gregorio Marañón -Madrid-, Hospital Clínico-Universitario de Valladolid, Hospital Río Hortega - Valladolid-, Instituto de Biología y Genética Molecular - Universidad de Valladolid-)**
- **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 and discussing the current and the future prospects of these new therapeutic methods
- c. Interventional cardiologists and cardiac surgeons interested in the results and perspectives of: gene vehiculization techniques, stimulation of endogenous progenitors, cell transplantation delivery systems or electromechanical devices to fight against cardiovascular diseases.
- 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 the attendees will have acquired the following skills:

1. Knowledge and ability to discuss the role of 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 on cardiovascular repair, through adult or embryonic stem cell transplantation, or by 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 to establish contacts for educational, scientific, and healthcare purposes.



- Spanish Society of Cardiology.  
Continuing Medical Education Accreditation Program.



- 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. .





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** and **Twitter**.

@cardiostemcell

#TECAM2015



Eric A. Adler (San Diego, USA)  
Reem Al Daccak (Paris, France)  
Piero Anversa (Boston, USA)  
Angel Arenal (Madrid, Spain)  
Christian Bar (Madrid, Spain)  
Atta Behfar (Rochester, USA)  
Javier Bermejo (Madrid, Spain)  
Juan Carlos Chachques (Paris, France)  
Steven Chamuleau (Utrecht, The Netherlands)  
Dominique Charron (Paris, France)  
Andreu M. Climent (Madrid, Spain)  
Stefanie Dimmeler (Frankfurt, Germany)  
David G. Dorado (Barcelona, Spain)  
Francisco Fdez-Aviles (Madrid, Spain)  
Arturo Fdez-Cruz (Madrid, Spain)  
Roberto Fdez-Viña (Buenos Aires, Argentina)  
Valentin Fuster (New York, USA)  
Cristina Garmendia (Madrid, Spain)  
Bernard Gersh (Rochester, USA)  
Mariann Gyongyosi (Viena, Austria)  
Joshua Hare (Miami, USA)  
Timothy Henry (Los Angeles, USA)  
Juan Carlos Izpisua (La Jolla, USA)  
Stefan Janssens (Leuven, Belgium)  
Christian Latremouille (Paris, France)  
Amir Lerman (Rochester, USA)  
Douglas W. Losordo (Boston, USA)  
Johannes M.I.H. Gho (Utrecht, The Netherlands)  
Enca Martí Rendon (Oxford, UK)  
John Martin (London, UK)  
Almudena Martínez-Fernández (Rochester, USA)  
Rafael Matesanz (Madrid, Spain)  
Philippe Menasché (Paris, France)  
Bernardo Nadal-Ginard (London, UK)  
Alexandra N. Nowbar (London, UK)  
Giulio Pompilio (Milan, Italy)  
Felipe Prosper (Pamplona, Spain)  
Jerome Roncalli (Toulouse, France)  
Nadia Rosenthal (Melbourne, Australia)  
Alberto San Román (Valladolid, Spain)  
José Luís Serna (Madrid, Spain)  
Duncan Stewart (Ottawa, Canada)  
Mark A. Sussman (San Diego, USA)  
Doris Taylor (Houston, USA)  
André Terzic (Rochester, USA)  
Kai C. Wollert (Germany)  
Joseph Wu (Los Angeles, USA)  
Raquel Yotti (Madrid, Spain)  
Andreas Zeiher (Frankfurt, Germany)







Hospital General Universitario  
Gregorio Marañón

Comunidad de Madrid



## DIRECTION

**Francisco Fernández-Avilés**

*Instituto de Investigación Sanitaria Gregorio Marañón  
Hospital General Universitario Gregorio Marañón (Madrid, Spain)*

## CO-DIRECTION

**M<sup>a</sup> 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 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  
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  
anafdez baza@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

ACCREDITATION

