

16th INTERNATIONAL SYMPOSIUM ON CARDIOVASCULAR REGENERATION AND REPAIR



www.cardiovascularcelltherapy.com

Symposium Director: Francisco Fernández – Avilés



Scientific Programme jointly organised with the ESC Working Group
on Cardiovascular Regenerative and Reparative Medicine

MADRID. SPAIN, MAY 9th—10th 2019

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C/ IBIZA, 43. 28007 MADRID

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The troubles of science and the cost of truth



Ulysses and the Sirens (Roman mosaic, Carthage 2nd Century AD, now in the Bardo Museum, Tunisia).

Like Ulysses in the *Odyssey*, regenerative medicine is winning battle after battle in the war against cardiovascular failure. Overcoming obstacles. Step by step.

In such a war, the main battle is waged today in defense and recognition of the rigor and honesty of scientists dedicated to Cardiovascular Regenerative Medicine. Accordingly, this 16th edition of the “Madrid Cardiovascular Regenerative Meeting” will be particularly focused on these aspects, which will be specifically addressed and discussed, along with the latest advances and controversies of the field, and with the ultimate aim of overcoming troubles for better planning the future.

As in previous editions, this meeting has been made possible thanks to the effort and enthusiasm of many people. All of us who have been involved in its preparation would like to thank you for your interest and support. We sincerely hope to meet the expectations of all those who will devote part of their valuable time to visit Madrid and to take part in the Symposium with us. We are excited and look very much forward to sharing this occasion with you.

Dr. Francisco Fernández-Avilés
Symposium Director





THURSDAY, 9th May 2019

7.45 – 8.30 REGISTRATION

8.30 – 9.30 WELCOMING

9.30 – 10.00 OPENING KEYNOTE LECTURE

Chair: David García-Dorado (Barcelona, Spain)
Innovative approaches to the management of CHF in the future
 Bernard Gersh (Rochester, USA)

10.00 – 12.10 BIOLOGICAL CLUES TO REPAIR THE BROKEN HEART

Chairs: Stefan Janssens (Leiden, Belgium)
 Jens Kastrup (Copenhagen, Denmark)
Panel Discussants: Dominique Charron (Paris, France)
 Daniele Torella (Catanzaro, Italy)
 Olaf Bergmann (Stockholm, Sweden)
 Wolfram Zimmermann (Gottingen, Germany)

10.00 - 10.20 **The development of cell lineages that form the mammalian heart**
 Miguel Torres (Madrid, Spain)

10.20 - 10.40 **Lessons from development in heart regeneration models**
 Juan Carlos Izpisua (San Diego, USA)

10.40 - 11.00 **Mechanisms of heart regeneration in mammalian. What matters?**
 Hesham Sadek (Dallas, USA)

11.00 - 11.20 **Cells and cardiac repair. Products and lessons**
 Eduardo Marban (Los Angeles, USA)

11.20 - 11.40 **When regeneration and repair is not possible. Can we replace?**
 Thomas Eschenhagen (Hamburg, Germany)

11.40 – 12.10 Discussion

12.10 – 12.30 Coffee Break



12.30 – 14.15 THE 2019 INEVITABLE DEBATE:

Stem cells in the adult heart. Myth or reality’?

Chairs	John F. Martin	(London, UK)
	James T. Willerson	(Houston, USA)
Panel Discussants	Roberto Bolli	(Louisville, USA)
	Stefan Janssens	(Leiden, Belgium)
	Hesham Sadek	(Dallas, USA)
	Georgina Ellison	(London, UK)

12.30 - 12.55 Genuine and solid evidence for the existence of bona fide adult cardiac stem cells

Daniele Torella (Catanzaro, Italy)

12.55 - 13.20 The limited regenerative role of cardiac stem cells

Jeffery Molkentin (Cincinnati, USA)

13.20—14.15 Discussion

14.15 – 15.00 Lunch and Poster Exhibition

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

A 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 winner 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.



15.00 – 15.15 Posters Award — Winners Communication

15.15 – 16.00 KEYNOTE SESSION

Randomized trials and tribulations; Registries and confounders: Things may not be what they seem.

Bernard Gersh (Rochester, USA)

16.00 – 18.00 TRANSLATIONAL AND CLINICAL STATE OF THE ART

Chairs	John F. Martin	(London, UK)
	Emerson C. Perin	(Houston, USA)
Panel Discussants	Joshua Hare	(Miami, USA)
	Timothy Henry	(Los Angeles, USA)
	Sol Ruiz	(Madrid, Spain)
	Jens Kastrup	(Copenhagen, Denmark)

16.00 - 16.15 Update on clinical use of IPSC. Are we closer to routine clinical use?
Joseph Wu (Stanford, USA)

16.15 - 16.30 Regenerative therapies against cardio-oncotoxicity
Roberto Bolli (Louisville, USA)

16.30 - 16.45 The Microcirculation: Center of the Cardiovascular Repair Universe
Douglas W. Losordo (Chicago, USA)

16.45 - 17.00 Autologous cells - the London experience
Anthony Mathur (London, UK)

17.00 - 17.15 CV regenerative therapy. More clinical trials warranted?
Anthony DeMaria (San Diego, USA)

17.15 - 17.30 From the idea to the market. Which are the barriers?
Miguel Mulet (Madrid, Spain)

17.30—18.00 Discussion



FRIDAY, 10th May 2019

9.00 – 9.30 BEST POSTERS PRESENTATION

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

9.30 – 10.45 RECENT CONTRIBUTIONS PRESENTED BY YOUNG INVESTIGATORS

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

Panel Discussants Ricardo Sanz (Madrid, Spain)
Joseph Wu (Stanford, USA)
Daniele Torella (Chicago, USA)

09.30 - 09.40 Extracellular vesicles released by allogeneic human cardiac stem/progenitor cells as part of their therapeutic benefit

Simon Brunel (Paris, France. Dr. Dominique Charron's group)

09.40 - 09.50 Electro-mechanical assessment of left ventricle rotation in heart failure patients with left bundle branch block using the NOGA system

Tomasz Jadczyk (Katowice, Poland. Dr. Wociej Wojakowski's group)

09.50 - 10.00 Active tracked intramyocardial catheter injections for regenerative therapy with real-time MR guidance: feasibility in the porcine heart

Steven Wenker (Utrecht, Netherlands. Dr. Chamuleau's group)

10.00 - 10.10 Advancing human myocardial tissue engineering by tailoring mechanical properties and improving tissue organization

Alain van Mil (Utrecht, Netherlands. Dr. Sluijter's group)

10.10 - 10.20 Exploring the outside: the potential of the epicardium for cardiac repair

Anke Smits (Leiden, Belgium)

10.20 - 10.45 Discussion



10.45 – 11.20 SPECIAL KEYNOTE SESSION AND DISCUSSION

Chairs:	James T. Willerson	(Houston, USA)
	Francisco Fdez-Avilés	(Madrid, Spain)
Panel Discussants:	Bernard Gersh	(Rochester, USA)
	Juan Carlos Izpisua	(San Diego, USA)
	Miguel Mulet	(Madrid, Spain)

10.45 - 11.05 Honesty and Integrity in our Field
John F. Martin (London, UK)

11.05 – 11.20 Discussion

11.20—11.45 Break

11.45 – 13.15 THE FIELD IN PERSPECTIVE

(Joint Session organized with the Working Group on Cardiovascular Regenerative and Reparative Medicine –CARE - of the European Society of Cardiology)

What do “gurus” predict? Aims and conclusions of the 1st CARE WG Retreat

Chairs:	James T. Willerson	(Houston, USA)
	Francisco Fdez-Avilés	(Madrid, Spain)
Panel Discussants:	Douglas W. Losordo	(Chicago, USA)
	Juan Carlos Izpisua	(San Diego, USA)
	Pedro L. Sánchez	(Salamanca, Spain)
	Sol Ruiz	(Madrid, Spain)

11.45 - 12.00 Emerging and classical products for cardiovascular repair
Lina Badimon (Barcelona, Spain)

12.00 – 12.15 Preclinical models on cardiovascular regenerative medicine
Steven Chamuleau (Utrecht, Netherlands)

12.15 – 12.30 Opportunity, design, regulation and funding of randomized clinical trials
Philippe Menasché (Paris, France)

12.30 – 12.45 European medical office from inside. The committee for advanced cell therapies
Giulio Pompilio (Milan, Italy)

12.45 – 13.15 Discussion



13.15 – 13.45 CLOSING KEYNOTE LECTURE

Chair: Arturo Fernández Cruz (Madrid, Spain)

Biological treatments to cure the heart. Is there a room?

Valentin Fuster (New York, USA)

13.45 – 14.15 SIXTH MADRID CARDIAC REGENERATION AWARDS

Chair: John F. Martin (London, UK)

14.15 ADJOURN & SPECIAL ANNOUNCEMENT

Francisco Fdez-Aviles (Madrid, Spain)

Emerson C. erin (Houston, USA)

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ORGANIZATION

- Instituto de Investigación Sanitaria Hospital Gregorio Marañón.
- Servicio de Cardiología. Hospital General Universitario Gregorio Marañón, Madrid.
- Centro de Investigación Biomédica en Red de Enfermedades Cardiovasculares del Instituto de Salud Carlos III (CIBERCV)
- 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.



The website 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 Cardiovascular Regeneration and Repair, so appropriate access to related sites has been created.

You can also join us on **Facebook** and **Twitter**.

@cardiostemcell



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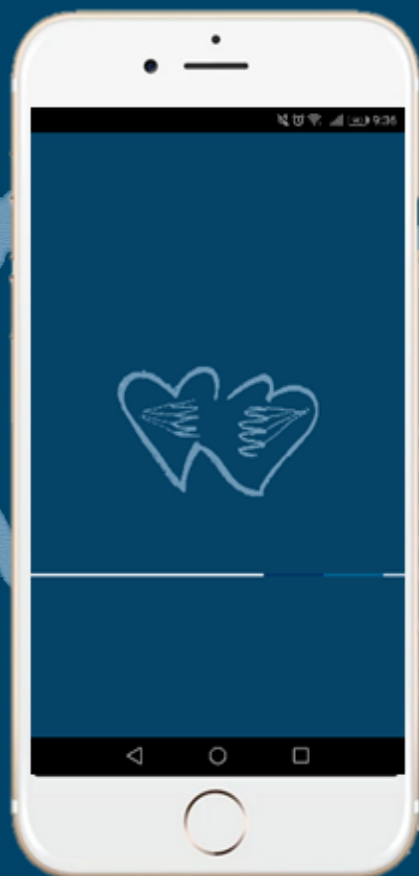
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