



# CELL THERAPY FROM THE BENCH TO THE BEDSIDE AND RETURN

## Directors:

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**Los Alcázares (Murcia) 15-19 de Julio 2013**



- **Place:** Hotel 525. Calle del Río Borines 58.  
30710 Los Alcázares, Murcia  
902 32 55 25
- **Duration:** 25 hours
- **Price:** 160 €
- **Registration Deadline:** from 13/03/2013 to 10/07/2013

## More Information and Registration Form:

[www.um.es/unimar](http://www.um.es/unimar)

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## INTERNATIONAL SUMMER COURSE. MURCIA UNIVERSITY 2013

### CELL THERAPY FROM THE BENCH TO THE BEDSIDE AND RETURN

**Place: Los Alcázares. Murcia. Spain**

**Credits: 1 credit ECTS**

**Dates: July 15-19, 2013**

#### **Aims**

The aim of this course is the diffusion of knowledge about stem cells and their therapeutic possibilities, with a special emphasis on Adult Stem Cells such as Hematopoietic Stem Cells and Mesenchymal Stems, and their current applications in the field of Regenerative Medicine.

The course is intended to provide a forum for scientific discussion with basic researchers and clinical experts in cellular therapy, and to set out the achievements and challenges in this exciting and growing area of clinical medicine therapy.

#### *Specific Course Objectives are:*

To analyze in depth the different types of stem cells, their biological properties, their laboratory manipulation and their clinical use.

To learn about the new types of hematopoietic cell transplantation, and new approaches of immune modulation.

To discuss the present status of preclinical studies and clinical trials of stem cell therapy for repair of damaged tissues and organs.



## Monday 15. Bone Marrow Stem Cells: Hematopoietic Stem Cells (HSC) and Hematopoietic Stem Cell Transplantation (HSCT)

### Morning Session

#### 09:00-09:30 h. Open Session.

Hon. Ms. Maria Angeles Palacios Sanchez.

Health Council of the Autonomous Community of the Region of Murcia. Murcia, Spain.

Hon. Mr. Jose Antonio Cobacho Gómez.

Rector of the University of Murcia. Murcia, Spain.

Hon. Mr. Antonio L. Andreu Pérez.

Director General, Institute of Health Carlos III. Madrid, Spain.

#### 09:30-10:00 h. The Biology of the Hematopoietic Stem Cell.

Carmen L. García de Insausti, MD, PhD

Hematology Department. Institute of Biomedical Research of Murcia - IMIB, Virgen de la Arrixaca University Hospital. University of Murcia, Murcia, Spain.

#### 10:00-10:30 h. Obtaining Hematopoietic Progenitors: Cellular Selection.

Miguel Blanquer, MD, PhD

Hematology Department. Institute of Biomedical Research of Murcia - IMIB, Virgen de la Arrixaca University Hospital. University of Murcia. Murcia. Spain.

#### 10:30-11:00 h. Coffee break

#### 11:00-11:30 h. HSCT: Technique and Complications.

Prof. Jose M. Moraleda.

Professor of Medicine. University of Murcia. Chief, Department of Haematology and HSCT Program. Institute of Biomedical Research of Murcia - IMIB, Virgen de la Arrixaca University Hospital. Murcia, Spain.

#### 11:30-12:15 h. Umbilical Cord Blood Transplantation.

Vanderson Rocha, MD, PhD.

Scientific Director of Eurocord Registry. Department of Hematology BMT, Hospital Saint Louis, University of Paris. Paris, France.

#### 12:15-13:00 h. Principles and Practice of Non-myeloablative HSCT

Prof. Sergio Giral

Professor of Medicine Weill Cornell College of Medicine. Chief, Adult Bone Marrow Transplant Service. Division of Hematologic Oncology. Memorial Sloan-Kettering Cancer Center. New York, NY, USA.

#### 13:00-15:00 h. Lunch

### Afternoon Session

#### 15:00-15:30 h. Short Lecture: Curing Hemoglobinopathies.

Prof. Franco Locatelli.

President of the Italian association for Pediatric Hematology and Oncology. Research Center, Bambino Gesù Children Hospital, Rome. Rome, Italy.

#### Debate session: Histocompatibility Antigen (HLA) Typing, HSC Donation, and Registry Issues.

Chair: Prof. Jose M. Moraleda.

Professor of Medicine. University of Murcia. Chief, Department of Haematology and HSCT Program. Institute of Biomedical Research of Murcia - IMIB, Virgen de la Arrixaca University Hospital. Murcia, Spain.

#### 15:30-15:40 h. The Spanish Model.

Prof. Gregorio Garrido.

Head of Service, Spanish National Transplant Organization (ONT). Madrid, Spain.

#### 15:40-15:50 The French Registry.

Vanderson Rocha, MD, PhD.

Scientific Director of Eurocord Registry. Department of Hematology BMT, Hospital Saint Louis, University of Paris. Paris, France.

#### 15:50-16:00 h. The Great Britain Experience.

Prof. Alejandro Madrigal.

European Bone Marrow Transplant Association President. London, U.K.

Scientific Director of The Anthony Nolan Trust. Chair of Haematology, Department of Haematology. The Royal Free and University College Medical School. London, UK.



## Tuesday 16. New HSCT Approches: HSCT Immunotherapy

### Morning Session

#### 09:00-09:45 h. The Immunotherapeutic Role of HSCT.

Prof. [Andrea Bacigalupo](#).

*Head Department of Hematology and Stem Cell Transplant Unit. Ospedale San Martino. Genoa. Italy.*

#### 09:45-10:15 h. Haploidentical Transplants and Role of NK Immunotherapy.

Prof. [Franco Locatelli](#).

*President of the Italian association for Pediatric Hematology and Oncology. Research Center, Bambino Gesù Children Hospital. Rome, Italy.*

#### 10:30-11:00 h. Coffee break

#### 11:00-11:45 h. New Strategies for Post-transplant Immunomodulation.

Prof. [Alejandro Madrigal](#).

*European Bone Marrow Transplant Association President. London. U.K. Scientific Director of The Anthony Nolan Trust. Chair of Haematology, Department of Haematology. The Royal Free and University College Medical School. London, UK.*

#### 11:45-12,30 h. Unrelated Donor Transplants. The MSK Experience in HSCT Immunomodulation.

Prof. [Sergio A. Giralt](#).

*Professor of Medicine Weill Cornell College of Medicine. Chief, Adult Bone Marrow Transplant Service. Division of Hematologic Oncology. Memorial Sloan-Kettering Cancer Center. New York, NY, USA.*

#### 12,30-14,30 h. Lunch

### Afternoon Session

#### 14:30-16:00 h. Debate session: Harnessing GVL Effect while Avoiding GVHD. What is the best URD transplant?

Chair: Prof. [Robert Sackstein](#).

*Professor, and Director of the Program of Excellence in Glycoscience, Harvard Medical School, Boston, MA, USA.*

#### Discussants:

Prof. [Alejandro Madrigal](#): URD unmanipulated SCT.

Prof. [Franco Locatelli](#): T-selected Haploidentical transplant.

Prof [Sergio Giralt](#): Double cord transplant.

Prof. [Vanderson Rocha](#): Single UC transplant.

Prof. [Andrea Bacigalupo](#): Lymphocyte infusions.



## Wednesday 17, Morning Session: Bone Marrow Stem Cells: Mesenchymal Stem Cells (MSC) and Mesenchymal Stem Cell Transplantation

### 09:00-09:30 h. The stem Cell Niche.

[Prof. Agustín Zapata.](#)

*Professor of Cellular Biology. Complutense University of Madrid. Madrid, Spain.*

### 09:30-10:00 h. The Regulation of the Stem Cell Microenvironment.

[Simon Mendez-Ferrer, PhD.](#)

*National Center for Cardiovascular Research (CNIC). Madrid, Spain.*

### 10:00-10:45 h. MSC: A New Paradigm for Cell Immunomodulation.

[Prof. Antonio Uccelli.](#)

*Professor of Neurology. Neuroimmunology Unit. Dept of Neurosciences, University of Genova. Genova, Italy.*

### 10:45-11:15 h. Coffee break

### 11:15-12:30 h. Stem Cell Trafficking: Biology and Manipulation via GPS.

[Prof. Robert Sackstein.](#)

*Professor, and Director of the Program of Excellence in Glycoscience, Harvard Medical School, Boston, MA, USA.*

[Dolores Lopez Lucas PhD.](#) [Prof. Jose M. Moraleda.](#)

*Unidad de Trasplante y Terapia Celular. Hospital Clínico Universitario Virgen de la Arrixaca. University of Murcia. Spain.*

### 12:30-13:00 h. The production of MSC for clinical use: GMP cell facilities.

[Prof. Ana Sanchez García.](#)

*Professor of Physiology. School of Medicine. Institute of Biology and Molecular Genetics (IBGM). University of Valladolid, Valladolid. Spain.*

### 13:00-15:00 h. Lunch

## Afternoon Session: Induced Pluripotent Stem Cells (iPSC)

### 15:00-15:30 h. iPSC as a Therapeutic Tool.

[Prof. Angel Raya.](#)

*ICREA Research Professor. Institute for Bioengineering of Catalonia. Barcelona, Spain.*

### 15:30-16:00 h. iPSC and Gene Therapy for Genetic Diseases.

[Prof. Juan Bueren.](#)

*Head of the Division of Hematopoiesis and Gene Therapy Division CIEMAT. University of Madrid. Madrid, Spain.*



## Thursday 18. Stem Cell Therapy (SCT). Clinical Trials in Non-neurologic Diseases

### Morning Session

**09:00-09:30 h. SCT in Cardiac Diseases.**

[Prof. Felipe Prósper.](#)

*Director of Cell Therapy Department. Co-director Hematology Dpt. University of Navarra. Navarra, Spain.*

**09:30-10:00 h. SCT in Diabetes Mellitus and its Complications.**

[Prof. Bernat Soria.](#)

*Director of the Stem Cells Department of the Andalusian Center for Molecular Biology and Regenerative Medicine (CABIMER). University Pablo de Olavide. Seville, Spain.*

**10:00-10:30 h. SCT to Improve Surgical Healing.**

[Prof. Damián García-Olmo.](#)

*Professor of Surgery. Director of the Cell Therapy Unit and Head of the Colorectal Surgery Unit. La Paz University Hospital. Autónoma University of Madrid. Madrid, Spain.*

**10:30-11:00 h. Coffee break**

**11:00-11:30 h. SCT for Bone Repair.**

[Prof. Javier García-Sancho.](#)

*Professor of Physiology. School of Medicine. Institute of Biology and Molecular Genetics (IBGM). University of Valladolid. Valladolid, Spain.*

**11:30-12:00 h. SCT for Cartilage Repair.**

[Prof. Pedro Guillén.](#)

*Clinical Research Unit, CEMTRO Hospital. Madrid, Spain.*

**12:00-12:30 h. SCT for Treatment of Transplant Rejection and GVHD.**

[Fermin Sanchez-Guijo, MD.](#)

*Hematology Department. University Hospital of Salamanca. University of Salamanca. Salamanca, Spain.*

**13:00-15:00 h. Lunch**

### Afternoon Session

**15:00-15:30 h. SCT in Ophthalmology.**

[Prof. Margarita Calonge.](#)

*Professor of Ophthalmology. Director, Ocular Immunology Unit, IOBA, University of Valladolid. Valladolid, Spain.*

**15:30-16:00 h. SCT in Odontology.**

[Prof. Francisco J. Rodriguez-Lozano.](#)

*Professor of Dentistry. Cell Therapy Research Group. Virgen de la Arrixaca University Hospital. University of Murcia. Murcia, Spain.*



## Friday 19. Stem Cell Therapy (SCT). Clinical Trials in Neurologic Diseases

### Morning Session

**09:00-09:30 h. The Neural Stem Cell niche.**

[Prof. Isabel Fariñas.](#)

*Professor of Cellular Biology. Dept. of Cellular Biology. University of Valencia CIPF. Valencia, Spain.*

**09:30-10:00 h. SCT in Parkinson's Disease.**

[Prof. Juan José Toledo.](#)

*Professor of Physiology. Director of the Department of Medical Physiology and Biophysics. Institute of Biomedical Research of Seville. IBI, Virgen del Rocío Hospital/CSIC/University of Seville. Seville, Spain.*

**10:00-10:30 h. SCT in ALS.**

[Letizia Mazzini, MD.](#)

*Head of the tertiary ALS Center. Department of Neurology, Eastern Piedmont University, Maggiore della Carità Hospital. Novara, Italy.*

**10:30-11:00 h. Coffee break**

**11:00-11:30 h. SCT in Neurodegenerative Diseases (ND). Results in Animal Models.**

[Prof. Salvador Martínez.](#)

*Professor of Neuro-Anatomy and Embryology. Experimental Embryology Lab. Institute of Neurosciences-CSIC, Universidad Miguel Hernández. Alicante, Spain.*

**11:30-12:00 h. SCT for other ND-Neuromuscular diseases.**

[Prof. Antonio Ucelli.](#)

*Professor of Neurology. Neuroimmunology Unit. Dept of Neurosciences. University of Genova. Genova, Italy.*

**12:00-12:30 h. Stem cell differentiation for cell replacement strategies in ND.**

[Prof. Josep M. Canals.](#)

*Professor of Cellular Biology. Dept. of Cell Biology, Immunology and Neuroscience. University of Barcelona. Barcelona, Spain.*

**13:00-15:00 h. Lunch**

### Afternoon Session

**15:00-16:00 Debate session: Stem Cell Therapy pros and cons. How do we move ahead?**

[Prof. Agustín Zapata.](#)

*Professor of Cellular Biology. Complutense University of Madrid. Madrid, Spain.*

**Discussants:**

[Prof. Salvador Martínez.](#)

[Prof. Antonio Ucelli.](#)

[Prof. Felipe Prósper.](#)

[Prof. Letizia Mazzini](#)

[Prof. Robert Sackstein.](#)