

Place: Hotel 525. Calle del Río Borines 58.
Los Alcázares, Murcia. Spain. Tlf. 902 32 55 25
Duration: 25 hours
Price: 160 € (Lunch included)
Deadline: 08/07/2016

REGISTRATION RULES

Complete the Registration Form at the official website:
<https://www.um.es/unimar/ficha-curso.php?estado=V&cc=51399>

Payment Methods: Credit Card (Website)

Cash – only in person: Download the Payment form. Fill in the form and return it with your payment to Universidad Internacional del Mar.

Banks: SABADELLCAM, BANCO MARE NOSTRUM, CAJAMAR and BANCO SANTANDER. Once payment is made you will be enrolled in the course. Students must be enrolled and have a regular attendance to obtain the diploma or its equivalent.

CREDIT RECOGNITION

This course enables you to obtain elective credits at the Universidad de Murcia, in accordance with the University's academic regulations.

Students registered at other universities must provide the Credit Recognition requirements for transfer of credit toward their degree program at their home university (certificate, diploma, program...)

The Course is pending approval by the Murcian Public Health System for being declared of Scientific and Medical Interest.

SUMMARY

Stem cells (embryonic, induced pluripotent and adult) are a potentially unlimited source of cells for research or for clinical use in transplantation. The ability of these cells to improve function or repair damaged tissue in animal models of disease has contributed to high expectations in the development of new therapies for human diseases that currently have no cure such as diabetes, Parkinson's and ischemic or degenerative diseases.

It seems appropriate to organize a forum for knowledge expansion of this type of cells, their biological characteristics, techniques of collection and handling in the laboratory and, particularly, its current and future therapeutic options, with scientists in basic science and clinic. This will get an objective, critical and useful information for the assistants.

TARGET GROUP

Students, graduates and others interested in the subject.



UNIVERSIDAD INTERNACIONAL DEL MAR

Edificio Luis Vives, 3ª planta

30100 Campus de Espinardo, Murcia

T. 868 888207/7262/3376/3360/3359

F. 868 88 38 97

unimar@um.es

www.um.es/unimar

UNIVERSIDAD DE MURCIA

VICERRECTORADO DE FORMACIÓN E INNOVACIÓN

SPONSORS



COLLABORATORS



UNIVERSIDAD
INTERNACIONAL
DEL MAR



CELL THERAPY: FROM THE BENCH TO THE BEDSIDE AND RETURN

ANIVERSARIO

Directors:

JOSE MARIA MORALEDA JIMENEZ
SALVADOR MARTINEZ PEREZ
DAMIAN GARCIA OLMO
ROBERT SACKSTEIN

Los Alcázares
from July 11st to July 15th



www.um.es/unimar
www.campusmarenostrum.es



MONDAY 11. Bone Marrow Stem Cells. Hematopoietic Stem Cell Transplantation (HSCT)

- 09:00 h. Open Session.

Hon. Mr. José Orihuela Calatayud. Rector of the University of Murcia, Spain.

Hon. Mr. Javier Castrodeza. Secretary General for Health and Consumers. Ministry of Health. Spain.

Hon. Ms. Encarnación Guillén Navarro. Health Council of the *Autonomous Community of the Region of Murcia*, Spain.

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

M. Dolores López Lucas, PhD. Department of Hematology and HSCT Program. Institute of Biomedical Research of Murcia (IMIB), Virgen de la Arrixaca University Hospital (HCUVA). Murcia, Spain.

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

Prof. Miguel Blanquer. Hematology Department. HCUVA – IMIB. University of Murcia. Murcia, Spain.

- 10:30 h. COFFEE BREAK.

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

Prof. José M. Moraleda. Professor of Medicine. University of Murcia. Chief, Department of Hematology and HSCT Program, HCUVA – IMIB. Murcia, Spain.

- 11:30 h. Minimizing HSCT complications. HLA-typing and other considerations.

Prof. Enric Carreras. Medical director of Bone Marrow Donors Spanish Registry (REDMO) and José Carreras Foundation against Leukaemia. Barcelona, Spain.

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

Prof. Sergio Giralt. Professor of Medicine Weill Cornell College of Medicine. Chief, Adult BMT Service. Division of Hematologic Oncology. Memorial Sloan-Kettering Cancer Center. New York, NY, USA.

- 12:30 h. Umbilical cord blood transplantation.

Prof. Jaime Sanz. Clinical Hematology & Hematopoietic Cell Transplantation Unit. La Fé University Hospital. Valencia, Spain.

- 13:00 h. LUNCH

- 14:30 h. Haploidentical transplants with cyclophosphamide post-Transplant.

Prof. Francisco Javier Bolaños Meade. Associate Professor of Oncology. Johns Hopkins Kimmel Comprehensive Cancer Center. Baltimore, USA.

- 15:00 h. Infusion of donor T cells genetically modified with inducible-caspase9 suicide gene to accelerate the immune recovery of patients given HSCT from an HLA-haploidentical donor after alpha/beta T-cell depletion of the graft.

Prof. Franco Locatelli. Professor of Medicine. Research Center, Bambino Gesù Children Hospital. Rome, Italy.

- 15:45 h. Working session: Collection and handling of hematopoietic progenitor cells.

Chairs: **Prof. Miguel Blanquer.**

Discussants: **Carmen Algueró Martín, PhD & Prof. Darío Sánchez Salinas, Ph.** Hematology Department & HSCT Program. HCUVA–IMIB. Murcia. Spain.

- 18:00 h. Book Presentation “Días de rabia” Written by Prof. Dr. Alejandro Madrigal

Moderated by Juan Tomás Frutos. Prof. of Internal Communication and Programming Audiovisual at University of Murcia.

TUESDAY 12. HSCT Immunotherapy & New Approaches

- 09:00 h. HSCT ambulatory program.

Prof. Gonzalo Gutiérrez. Hematology Department Hospital Clinic, Barcelona, Spain.

- 09:45 h. Immunobiology of Allogeneic Transplantation. GVHD.

Prof. Jose Antonio Pérez Simón. Professor of Hematology. Department of Hematology. Institute of Biomedicine, Virgen del Rocío University Hospital. University of Sevilla. Sevilla, Spain.

- 10:30 h. COFFEE BREAK.

- 11:00 h. New insights in cell therapy. The hematologist point of view.

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

- 12:00 h. CAR T- cells.

Prof. Sergio 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.

- 13:00 h. LUNCH.

- 15:00 h. Debate session: Harnessing the GVL Effect. New strategies for cure with cells. **Chairs:** **Prof. José M. Moraleda and Prof. Franco Locatelli**

- T and NK based new immunotherapeutic approaches. **Prof. Alejandro Madrigal**
- In vivo T-depleted SCT. **Prof. Francisco Javier Bolaños Meade.**
- Regulation of T-Cell trafficking to control GVHD. **Prof. Robert Sackstein**
- In vitro expanded effector T-Cells. **Prof. Sergio Giralt**

WEDNESDAY 13. Mesenchymal Stem Cells (Msc) and Induced Pluripotent Stem Cells (iPSC). Scientific Base for Therapeutic Use

- 09:00 h. The stem Cell Niche.

Prof. Agustín Zapata. Prof. Cellular Biology. Complutense Univ. of Madrid. Spain.

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

Prof. Simón Méndez-Ferrer. Haematology Department, NHS-Blood and Transplant. Cambridge Biomedical Campus. University of Cambridge. Cambridge, UK.

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

Paul J. Simmons, PhD. Research & New Product Development. Mesoblast Limited. Melbourne, Australia.

- 10:45 h. COFFEE BREAK.

- 11:15 h. iPSC as a Therapeutic Tool.

Prof. Ángel Raya. Director Center of Regenerative Medicine in Barcelona (CMRB). Barcelona, Spain.

- 11:45 h. iPSC and Gene Therapy for Genetic Diseases.

Prof. Juan Bueren. Head of the Division of Hematopoiesis and Gene Therapy, CIEMAT. University of Madrid. Madrid. Spain.

- 12:30 h. LUNCH.

- 14:30 h. SCT for Treatment of Transplant Rejection and GVHD.

Prof. Fermín Sanchez-Guijo. Hematology Department. University Hospital of Salamanca. University of Salamanca. Salamanca, Spain.

- 15:00 h. Stem cell trafficking. Optimizing MSC therapeutics.

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

- 15:45 h. Working session: Good manufacturing practice in production of MSC and Clinical Trials. Poster session and Discussion.

Discussants: **M. Dolores López, PhD. Carmen Algueró, PhD. Darío Sánchez, Ph.**

THURSDAY 14. Stem Cell Therapy (STC) and Tissue Engineering. Clinical Trials in Non-Neurologic Diseases

- 09:00 h. SCT in Cardiac Diseases.

Prof. Felipe Prósper. Director of Cell Therapy Department. Co-director Hematology Department. University of Navarra. Pamplona. Spain.

- 09:30 h. SCT in Diabetes Mellitus.

Prof. Bernat Soria. Director of the Stem Cells Department of the Andalusian Center for Molecular Biology and Regenerative Medicine (CABIMER). University Pablo de Olavide. Sevilla. Spain.

- 10:00 h. SCT for Osteoarticular Repair.

Prof. Javier García-Sancho. Professor of Physiology, University of Valladolid. Institute of Biology and Molecular Genetics (IBGM). Valladolid. Spain.

- 10:30 h. COFFEE BREAK.

- 11:00 h. SCT for Cartilage Repair.

Prof. Pedro Guillén. Clinical Research Unit, CEMTRO Hospital. Madrid. Spain.

- 11:30 h. SCT to improve Healing in Surgery.

Prof. Damián García Olmo. Prof. of Surgery. Chief of Dept. of Surgery. Fundación Jiménez Díaz University Hospital. Autonomous University of Madrid. Madrid, Spain.

- 12:00 h. SCT in Odontology.

Prof. Fco. Javier Rodríguez-Lozano. Professor of Dentistry, University of Murcia. HCUVA – IMIB. Murcia, Spain.

- 12:30 h. Stem cell based organ engineering.

M^a Eugenia Fernández, PhD. Technical Director of Cell Production Unit. Gregorio Marañón University Hospital. Research Institute Gregorio Marañón. Madrid. Spain.

- 13:00 h. LUNCH.

- 15:00 h. Stem cell based new strategies.

Prof. Massimo Dominici. Professor in Oncology and Hematology. Laboratory of Cell Biology and Advanced Cancer Therapy. President International Society of Cellular Therapies (ISCT). University of Modena and Reggio Emilia. Modena, Italy.

- 15:45 h. Working session: Gene editing. Theoretical and practical issues.

Chairs: **Prof. José Carlos Segovia.**

Discussants: **David García Bernal, PhD. & José E. Millán Rivero, PhD.** Hematology Department and HSCT Program. HCUVA – IMIB. Murcia. Spain.

FRIDAY 15. Stem Cell Therapy (SCT). Clinical Trials in Neurologic Diseases Use

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

Prof. Isabel Fariñas. Professor of Cellular Biology. Department of Cellular Biology. University of Valencia CIPF. Valencia. Spain.

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

Prof. Juan José Toledo. Professor of Physiology. Director of the Department of Medical Physiology and Biophysics. IBI, Virgen del Rocío Hospital-CSIC-University of Sevilla. Sevilla. Spain.

- 10:00 h. Stem cell differentiation for cell replacement strategies in Huntington disease.

Prof. Josep M. Canals. Professor of Cellular Biology. Department of Cell Biology, Immunology and Neuroscience. University of Barcelona. Barcelona, Spain

- 10:30 h. COFFEE BREAK.

- 11:00 h. The neurovascular unit in CNS diseases: a natural target for cell therapy.

Prof. Salvador Martínez. Director of the Institute of Neurosciences of Alicante. Professor of Human Anatomy and Embryology. Miguel Hernández University, Alicante, Spain.

- 11:30 h. SCT for spinal cord injury.

Prof. Jesús Vaquero. Professor of Neurosurgery. Autonomous University of Madrid. Director of the Neuroscience Research Unit, Puerta de Hierro-Majadahonda University Hospital. Madrid, Spain.

- 12:00 h. Debate Session: Regenerative medicine in the Media.

Chair: **Jorge Sánchez.** Chief of communication services SEHH.

Discussants: **Sonia Moreno.** Diario Médico.

Emilio de Benito. El País.

Jesús Méndez. Revista Quo y SINC.

Emma Bernardo. MedLab Media Group.

- 13:30 h. LUNCH.

- 15:00 h. Debate session: MSC therapy pros and cons. Ethical and regulatory aspects.

Chairs: **Prof. Robert Sackstein and Prof. Agustín Zapata.**

- **Natividad Calvente, PhD.** Associate Director Policy/Govern Relations. Merck Sharp and Dome. Madrid, Spain.
 - **Augusto Silva, PhD.** Associate Director Policy/Govern Relations. Merck Sharp and Dome. Madrid, Spain.
 - **Paul J. Simmons, PhD.** Research & New Product Development. Mesoblast Limited. Melbourne, Australia.
 - **Marcos Timón, PhD.** Head of service at the Unit for Advanced Therapies and Biotechnology, Spanish Medicines Agency (AEMPS). Madrid. Spain.
 - **Jose Francisco Tomás, PhD.** Medical Director. SANITAS. Madrid. Spain.
- 16:30 h. Closing ceremony and awarding of certificates.