



CURSOS DE EXTENSIÓN
UNIVERSITARIA 2024 /
UNIVERSIDAD DE MURCIA

ADVANCED THERAPIES

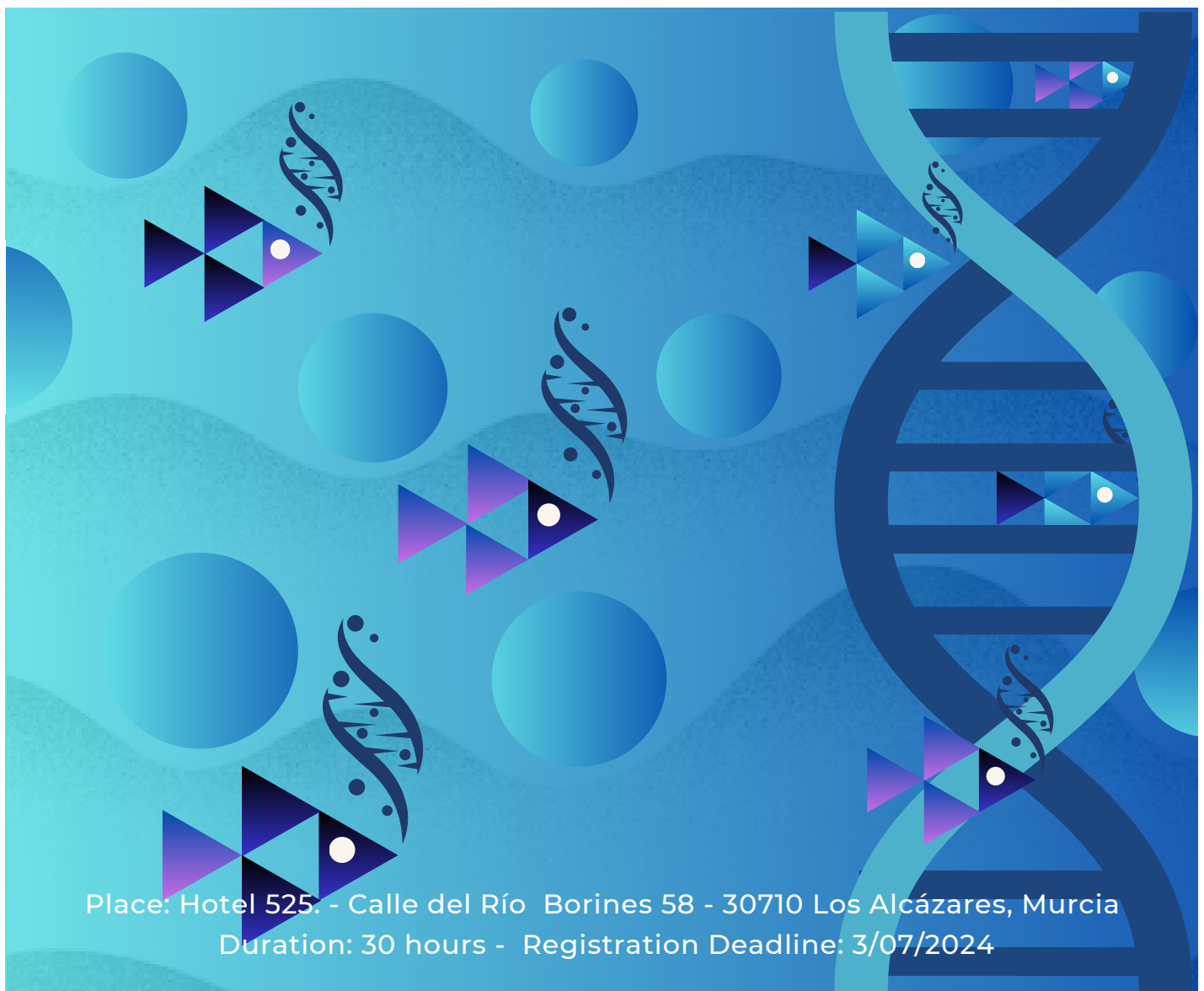
Scientific basis & Clinical uses

SUMMER COURSE 2024-18TH EDITION
FROM 8-12 OF JULY- LOS ALCÁZARES
MURCIA

Directors

Prof. José María Moraleda
Prof. Robert Sackstein

More Information and Registration Form:
<https://www.um.es/web/cursosdeextension/>



Place: Hotel 525. - Calle del Río Borines 58 - 30710 Los Alcázares, Murcia
Duration: 30 hours - Registration Deadline: 3/07/2024



UNIVERSIDAD
DE MURCIA



Sociedad Española de
Hematología y Hemoterapia

CURSOS DE EXTENSIÓN UNIVERSITARIA



UNIVERSIDAD
DE MURCIA

DIRECTORS

Prof. José María Moraleda Jiménez.

Professor of Medicine. University of Murcia. Head Dpt. of Hematology and HSCT Program. Institute of Biomedical Research of Murcia - IMIB, Vigen de la Arrixaca University Hospital. Murcia, Spain.

Prof. Robert Sackstein.

MD,PhD. Senior Vice-President for Global Medical Affairs, Florida International University, Miami, FL Professor Emeritus, Harvard Medical School, Boston, MA.

AIMS

The aim of this course is the dissemination of knowledge regarding Advanced Therapies (gene therapy, cell therapy, tissue engineering) and their potential for revolutionizing clinical medicine, with a special emphasis on current applications in genetic and neoplastic diseases and in “Regenerative Medicine”.

The course will provide a comprehensive review of current clinical applications of Advanced Therapies, a forum for open discussion with basic and clinical researchers that are experts in Advanced Therapies, and will offer in-depth perspectives on the achievements and challenges of this exciting and growing area of biomedical science.

Specific Course Objectives are:

To compare and contrast the different types of Advanced Therapies and the biological properties that fuel their clinical applications.
To educate about advances in hematopoietic stem cell transplantation, the first cellular therapy to cure genetic and malignant diseases.
To inform on advances in gene therapy, cell-based immunotherapy and Regenerative Medicine, in context of the regulatory aspects of production/manufacture and clinical delivery of the relevant biomedical products.
To present and discuss the current status of preclinical studies and clinical trials of Advanced Therapies to cure diseases.

SCIENTIFIC PROGRAM RICORS/TERAV



PLACE: HOTEL 525 LOS ALCÁZARES - MURCIA

Duration: 30 hours

Language: Spanish/English

Max enrollment: 200 students

Prize: 200€

Online:100€

TARGET GROUP

Collective of health professionals and students: haematologists and physicians of any other specialty interested in advanced therapies, as well as health professionals, researchers and university students of health and health-related degrees.

Other target groups are not professionals: groups involved who benefit from the information being shared in this course, such as patient associations, industry, companies, students, as well as other people and sectors of the population, with curiosity in the scientific field, who want obtain objective, critical and useful information to lay the foundations of appropriate knowledge.

REGISTRATION RULES

Please complete the Registration Form at the official website:

<https://www.um.es/unimar>

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: Sabadell, Bankia, Cajamar and 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.



Monday - 8 -July

INTRODUCTION TO ADVANCED THERAPIES.

Hematopoietic Stem Cell Transplantation: The first successful Cell Therapy.

09:00-09:30 h. Opening Session

Hon. Mr. José Luján.

Rector of the University of Murcia. Murcia, Spain.

Hon. Marina Pollán.

Director Institute of Health Carlos III (ISCIII). Madrid. Spain.

Morning Session.

Chairs:

Prof. Robert Sackstein. Professor Emeritus, Harvard Medical School. Boston, MA. Senior Vice-President for Global Medical Affairs, Florida International University. Miami, FL. USA.

Prof. Alejandro Madrigal.

Professor of Haematology, UCL Cancer Institute. Honorary Consultant, Royal Free NHS Trust UCL. Country Ambassador for México. London, UK.

09:30-10:00 h. *Stem Cells (SC): Types and biological characteristics.*

Prof. Agustín Zapata.

Department of Cell Biology, Faculty of Biology, Complutense University of Madrid, Spain.

10:00-10:30 h. *Advanced Therapies: principles and definitions. Concept of "living medications" and sources for translational therapies.*

Prof. Gloria Carmona.

Radytta. Andalusian Network for the design and translation of Advanced Therapies. Fundación Progreso y Salud. Sevilla, Spain.

10:30-11:00 h. Break.

11:00-11:30 h. *Hematopoietic stem cell transplantation: the first successful "Advanced Therapy".*

Prof. Anna Sureda.

President EBMT. Head Hematology Dpt. ICO. Barcelona, Spain.

11:30-12:00 h. *Basis of gene therapy to improve Advanced Therapy Medicinal Products.*

Prof. María Tristán Manzano.

CSO. Lentistem. Genyo. Granada. Spain.

12:00-12:30 h. *The Innate and Adaptive immune system: The basis of Cellular Immunotherapy and CAR-T cells.*

Prof. África González Fernández.

Full Professor of Immunology. University of Vigo. Pontevedra, Spain.

12:30-13:00 h. *Somatic Cell Therapy with Mesenchymal Stem cells: Biological functions and sources for clinical translation.*

Prof. Sandra Muntión.

Senior Researcher. Hematology Department. Lab Cellular Therapy. Institute of Biomedical Research of Salamanca (IBSAL), University Hospital of Salamanca, Spain.

13:00- 13:30 h. Discussion.

13:30-15:30 h. Lunch.

Afternoon Session.

Chair: Prof. José M. Moraleda. Professor Emeritus. University of Murcia, Spain.

15:30-16:15 h. *Tissue engineering and organoids for clinical applications.*

Prof. Nuria Monserrat.

Professor of Research. ICREAs. Bio-engineering Institute of Catalonia (IBEC). Barcelona. Spain.

16:15-17:00 h. *Invited Talk: The wisest and most faithful friends.*

Prof. Cristóbal Belda Navarro.

Professor of Art History. University of Murcia. Spain.

17:00-18:00 h. Welcome students' reception.



Tuesday- 9 - July

THE SPANISH NETWORK OF ADVANCED THERAPIES TRANSLATIONAL RESEARCH.

Gene Therapy: Update of research achievements.

Morning Session.

09:00-09:30 h. The Spanish Network of Advanced Therapies. A model of collaborative research.

José M. Moraleda.

Ricors TeraV Coordinator. ISCIII.

Gene therapy: Update of research achievements.

Chairs:

Prof. Juan Bueren. Biomedical Innovation Unit. CIEMAT. Spain.

Prof. Francisco Martín. GENYO. University of Granada. Spain.

09:30-10:00 h. Gene editing innovations (new vectors) for gene therapy applications.

Prof. Francisco Martín Molina.

GENYO. Faculty of Medicine. University of Granada. Spain.

10:00-10:30 h. Advances in gene therapy and gene editing in metabolic diseases.

Prof. Gloria González-Aseguinolaza.

Head of the Gene Therapy Program at CIMA
Coordinator of advanced therapies at IdiSNA.
University of Navarra. Pamplona. Spain.

10:30-11:00 h. Advances in gene therapy of neurodegenerative diseases.

Prof. Assumpció Bosch.

Professor. Department of Biochemistry and
Molecular Biology. Institute of Neurosciences.
Autonomous University of Barcelona, Spain.

11:00-11:30 h. Break.

11:30-12:00 h. Advances in hematopoietic stem cell gene therapy.

Prof. Juan Bueren.

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

12:00-12:30 h. Advances in Virotherapy as a tool to cure cancer (new replicative virus).

Prof. Ramón Alemany.

Head Cancer immunotherapy division. Institut
Català d'Oncologia - IDIBELL. Barcelona. Spain.

12:30-13:00 h. Results of cell therapy - virotherapy for children's diseases.

Prof. Manuel Ramírez.

Director of the Unit for Cell & Gene Therapies.
University Hospital Niño Jesús Madrid. Spain.

13:00-13:30 h. Oncolytic virotherapy.

Prof. Juan José Rojas Expósito.

Ramón y Cajal Researcher. Immunology Unit.
Department of Pathology and Experimental
Therapies. University of Barcelona (IDIBELL)
Barcelona. Spain.

13:30- 15:30 h. Lunch.

Afternoon Session.

Technological advances and manufacture.

Chairs:

Prof. Nuria Monserrat. Professor of Research.
ICREA. Bio-engineering Institute of Catalonia
(IBEC). Barcelona.

Prof. Anna Sureda. President EBMT. Head
Hematology Dept. ICO. Barcelona, Spain.

15:30-16:00 h. TeraV Platform of GMP facilities: advances in manufacture of Advanced Therapy Medicinal Products (ATMPs).

Prof. María Eugenia Fernández-Santos.

PhD. Technical Director. Cell Production Unit.
Gregorio Marañón University Hospital. Madrid,
Spain.

16:00-16:30 h. Virus production for gene therapy and advanced therapies.

Prof. Josep M. Canals.

Professor of Medicine University of Barcelona.
Dpt. of Biomedicine. Barcelona. Spain.

16:30-17:00 h. Invited Talk: Environmental therapy in the Mar Menor, 8 years later.

Prof. Celia Martínez Mora.

Murcian Institute of Agricultural, Environmental
Research and Development (IMIDA). Murcia.
Spain.



Wednesday - 10 - July

ANTITUMOR IMMUNOTHERAPY. Chimeric Antigen Receptor (CAR) cells.

Morning Session.

Chairs:

Prof. Felipe Prósper. Professor of Hematology. University of Navarra.

Prof. Manel Juan. Professor of Immunology. University of Barcelona.

09:00-9:30 h. CAR T- cells. Biological principles and innovations (transpoCAR).

Prof. Felipe Prósper.

Professor of Hematology. University of Navarra. CIMA. Spain.

09:30-10:00 h. Results of academically developed CAR T- cells. Ari 0001, Ari 0002 and beyond.

Prof. Manel Juan.

Head Immunology Dpt. Hospital Clinic. Professor of immunology. University of Barcelona, Spain.

10:00-10:30 h. Research in CART therapies in the IJC laboratory.

Prof. Pablo Menéndez.

Research Professor. ICREA. Jose Carreras Research Institute. University of Barcelona. Spain.

10:30-11:00 h. Clinical research of CAR T- cells in treatment of non-Hodgkin´s Lymphoma.

Prof. Francesc Bosch.

Professor of Medicine. University of Barcelona. Hospital Vall d´Hebron. Barcelona, Spain.

11:00-11:30 h. Break.

11:30-12:00 h. Development of an academic CAR: from the bench to the bedside.

Prof. José Antonio Pérez Simón.

Professor of Medicine. University of Sevilla. Hospital Virgen del Rocío. Sevilla, Spain.

12:00-12:30 h. Advanced Academic CAR T- cells for the treatment of Hodgkin lymphoma.

Prof Javier Briones.

Head Hematology and Gene Therapy Dpt. Hospital Sant Pau. Autonomous University of Barcelona. Spain.

12:30-13:00 h. CAR-NK cells: Scientific basis and development of one clinical trial.

Prof. Cristina Eguizabal.

Coordinator of Advanced Therapies Unit at Basque Center for Blood Transfusion and Human Tissues-Osakidetza and Group Leader of Cell Therapy, Stem Cells and Tissues Group at Biobizkaia Health Research Institute, Bilbao, Spain.

13:00-13:30 h. CAR-NK approach for children with solid tumors.

Prof. Halin Bareke.

Advanced Therapies Unit. Autonomous University of Madrid. Hospital La Paz, Madrid, Spain.

13:30-15:30 h. Lunch.

Afternoon Session.

15:30-16:00 h. New forms of immunotherapy. T cell engagers.

Prof. Joaquín Martínez.

Professor of Medicine. Complutense University of Madrid. Hospital 12 Octubre, Madrid, Spain.

16:00-16:30 h. Neurocytotoxicity processes in antitumor treatments.

Prof. José Luis Labandeira.

Professor of Medicine. University of Santiago. Santiago de Compostela, Galicia. Spain.

16:30-17:00 h. Invited Talk: 25 necessary ingredients for success in the XXI century.

Mr. José Luis Latorre Martínez.

CEO. IZASA S.A.



Thursday-11-July

SOMATIC CELL THERAPY AND TISSUE ENGINEERING. Update.

Morning Session.

Chairs:

Prof. Agustín Zapata. Professor of Cell Biology. Complutense University of Madrid, Spain.

Prof. Damián García-Olmo. Professor of Surgery. Autonomous University of Madrid. Spain.

09:00-9:30 h. *Mesenchymal stem/stromal cell (MSC) therapy: clinical applications.*

Prof. Joaquim Vives.

Banc de Sang I Teixits. Barcelona. Spain.

09:30-10:00 h. *The glycobiology of the major adult stem cells: HSC and MSC.*

Prof. Robert Sackstein.

Professor Emeritus, Harvard Medical School. Boston, MA. Senior Vice-President for Global Medical Affairs, Florida International University. Miami, FL. USA.

10:00-10:30 h. *MSC in angiogenesis and vasculogénesis.*

Prof. Lina Badimón.

Program director. Cardiovascular Research. Hospital Sant Pau. Barcelona. Spain.

10:30-11:00 h. *Break.*

11:00-11:30 h. *Fucosylated MSC therapy for treatment of osteoporosis.*

Prof. José M. Moraleda.

Professor Emeritus of Medicine. University of Murcia. IMIB-Pascual Parrilla. Murcia, Spain.

11:30-12:00 h. *The Clinical Trial Process in Advanced Therapies: MSCs in Perianal Crohn's Disease as a Paradigm.*

Prof. Damián García-Olmo.

Professor of Surgery. Chief of Department of Surgery. Fundación Jimenez Diaz University Hospital. Autonomous University of Madrid. Madrid, Spain.

12:00-12:30 h. *Microvesicles as a new tool for therapy.*

Prof. Fermín Sánchez-Guijo.

Professor of Hematology. University Hospital of Salamanca. University of Salamanca. Spain.

12:30-13:00 h. *MSC therapy for the treatment of autoimmune diseases.*

Prof. Julia Barbado Ajo.

University Hospital Rio Hortega. Valladolid. Spain.

13:00-13:30h. *Cell therapy and bioengineering for skin diseases.*

Prof. Alvaro Meana.

University of Oviedo. Spain.

13:30-15:30 h. *Lunch.*

Afternoon Session.

15:30-16:00 h. *Eph/ Ephrin signalling, new target for governing MSC biology.*

Prof. Agustín Zapata.

Department of Cell Biology, Faculty of Biology, Complutense University of Madrid, Spain.

16:00-16:30 h. *Pericytes and MSC: a new potential therapy for the treatment of Glioblastoma.*

Prof. Salvador Martínez Pérez.

Professor of Human Anatomy and Embryology. University Miguel Hernandez-CSIC. Elche. Spain.

16:30-17:00 h. *Atypical sources of MSC and new animal models for cell therapy research.*

Prof. Francisco Sánchez-Margallo.

Director. Minimally Invasive Surgery Center. Cáceres. Spain



Friday-12-July

ADVANCED THERAPIES PRESENT AND FUTURE CHALLENGES.

Morning Session

Chairs:

Prof. María Jesús Lamas. Director. Spanish Agency of Medicaments and Health Products.

Prof. Anna Sureda. President EBMT. Head Hematology Dpt. ICO. Barcelona, Spain.

09:00-09:30 h. *Advanced Therapies: the role of Spanish Agency of Medicaments. How to facilitate academic research.*

Prof. Sol Ruiz Antúnez.

Head of the Unit of Biotechnology and Advanced Therapies at EMA. AEMPS. Madrid, Spain.

09:30-10:00 h. *Hospital exemption and other regulatory key points for academic manufacture.*

Prof. Cristina Avendaño.

Coordinator. Regulatory Committee. Spanish Network of Advanced Therapies.

10:00-10:30 h. *ATMPs and the importance of quality: the potency tests.*

Prof. María Esther Martínez Muñoz.

Head Manufacture Facility. University Hospital Puerta de Hierro. Madrid..

10:30-11:00 h. Break.

11:00-11:30 h. *The Spanish model of "point of care manufacture" to facilitate access.*

Prof. Alvaro Urbano.

Professor of Medicine. University of Barcelona. Hospital Clinic. Barcelona, Spain.

11:30-12:00 h. *The role of public-private collaboration in the development of ATMPs in Spain.*

Prof. Raquel Yotti Álvarez.

PERTE Commissioner for the vanguard Health. Ministry of Science, Innovation and Universities.

12:00-13:00 h. Round table: The future of ATMPs. (10min. each and discussion).

Chair: Prof. Anna Sureda. President EBMT. Head Hematology Department. ICO. Barcelona, Spain

What is missing in evidence generation? Safety data does not equal patient-reported outcomes.

Prof. Natacha Bolaños.

Patient association. Lymphoma coalition. Spain.

ATMPs: is the Soho important?

Prof. Lola Hernandez Maraver.

Medical director. National Transplant Organization (ONT). Madrid. Spain.

ATMPs: how to get them affordable in the context of the National Health System.

Prof. César Hernández.

General Sub-Director of Common Portfolio of Services of the National Health and Pharmacy System. Ministry of Health. Spain.

13:00-13:30 h. Closing Conference: *Are there any ethical concerns in biological and technical advances?*

Prof. Francisco Jarauta.

Professor of Phylosophy. University of Murcia. Spain.

13:30-14:00 h. Closing ceremony.



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