



# STEM CEL AWARENESS DAY

**October 7, 2025** 



**Private Faculty of Medicine of Marrakesh Private University of Marrakesh Marrakesh-MOROCCO** 



## **SYMPOSIUM**

### **Induced pluripotent Stem Cells in Morocco**

Opportunities, Challenges, and Perspectives











INDUCED PLURIPOTENT STEM CELLS IN MOROCCO Opportunities, Challenges, and Perspectives



### **WELCOME NOTE**

It is my great pleasure to welcome you to the Private University of Marrakesh for this scientific symposium, co-organized with the Moroccan Society for Regenerative Therapies (MSRT). The theme of this event, "Induced Pluripotent Stem Cells in Morocco: Opportunities, Challenges, and Perspectives," highlights a fascinating frontier in regenerative medicine.

The groundbreaking discovery of induced pluripotent stem cells (iPSCs) by the Nobel prize in Physiology or Medicine, Pr Shinya Yamanaka in 2006 revolutionized biomedical research and regenerative medicine, paving the way for new breakthroughs in understanding diseases, developing innovative treatments, and advancing personalized medicine.

This event brings together a diverse group of experts from universities, research centers, hospitals, biotechnology industries, and partner institutions. It offers a unique opportunity for sharing knowledge, exchanging experiences, and discussing best practices in the rapidly evolving field of stem cell research.

By promoting collaboration among researchers, clinicians, industry leaders, and policymakers, this symposium aims to work towards developing a national roadmap for advancing research, training, and innovation in regenerative medicine. Together, we hope to establish Morocco as a leading player in biotechnology, personalized medicine, and cell-based therapies.

I wish you an engaging and inspiring experience during this event, and I look forward to the productive discussions and partnerships that will arise from it.

Welcome to the Private University of Marrakesh, and thank you for joining us.



**Professor Mohamed KNIDIRI** 

**President, Private University of Marrakesh (UPM)** 

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### **RATIONALE**

The discovery of induced pluripotent stem cells (iPSCs) by Pr Shinya Yamanaka in 2006 revolutionized biomedical research and regenerative medicine. This groundbreaking technology, which enables the reprogramming of adult cells into pluripotent stem cells, opens new perspectives for disease modeling, drug development, and personalized therapies. Today, iPSCs became central to biotechnology, transforming medical practices and improving the management of complex diseases by facilitating the development of tailored treatments as well as advancing our understanding of human biology and pathology.

On the occasion of Stem Cell Awareness Day, it is crucial to reflect on Morocco's positioning in relation to these scientific advances. Despite notable progress in biomedical research, the use of iPSCs remains limited. Among the main obstacles are the lack of technological platforms, the scarcity of specialized expertise, the absence of adapted regulatory frameworks, and financial constraints. Yet, these cells hold tremendous potential for the treatment of major diseases such as neurodegenerative disorders, metabolic conditions, cardiovascular diseases, liver pathologies, and certain types of cancer.

The Moroccan Society for Regenerative Therapies (MSRT), in partnership with the Private University of Marrakesh, is jointly organizing a symposium entitled: "Induced Pluripotent Stem Cells in Morocco: Opportunities, Challenges, and Perspectives", which will take place on October 7, 2025, in Marrakesh.

The symposium's comprehensive agenda aims to evaluate existing knowledge, uncover emerging opportunities, and address the scientific, technical, ethical, and regulatory challenges in regenerative medicine using iPSCs, and to propose a cohesive national roadmap for research, training, and innovation in this rapidly evolving field.

This initiative aims to establish Morocco as a competitive player in biotechnology, personalized medicine, and cell-based therapies by strengthening national expertise, building strategic partnerships, and integrating into global research networks, thereby creating a robust national ecosystem focused on health, innovation, and scientific excellence.



**Symposium Chair** 



**Scientific Coordinator** 



**General Rapporteur** 



**Technical Manager** 



**Pr Hicham Chatoui** 



### Pr. Mhamed HARIF

Mhamed Harif, MD, is currently President of the Moroccan Society of Hematology. He was a Professor of Hematology and Pediatric Oncology at the Faculty of Medicine, University of Casablanca, with over 35 years of experience in clinical practice, research, and hospital leadership. He served as Director of major hospitals including Cheikh Khalifa International (2015–2017), Mohammed VI University Hospital Marrakesh (2008–2015), and 20 Août 1953 Hospital Casablanca (2005–2008). Founder and President of the Franco-African Pediatric Oncology Group. He is also an active member of leading international societies such as the American Society of Hematology, the International Society of Pediatric Oncology, and the Francophone Society of Bone Marrow Transplantation. His work has significantly advanced pediatric oncology, stem cell transplantation, and innovative hospital programs in Morocco and beyond. He has authored five reference books, published 54 PubMed-indexed articles, and collaborates with St. Jude Children's Research Hospital



### Pr. José Maria MORALEDA-JIMENEZ

Jose M. Moraleda, MD, PhD, is a Professor of Medicine (Hematology) at the University of Murcia, Spain, with over 30 years of experience in stem cell transplantation, advanced therapies, and regenerative medicine. He earned his medical degree from the University of Navarra and his PhD from the University of Salamanca, followed by research fellowships at Hammersmith Hospital, London, and the Fred Hutchinson Cancer Research Center, Seattle. Since 2012, he has led the Hematology Department and directed the Bone Marrow Transplant & Cellular Therapy Unit at the University Hospital Virgen de la Arrixaca. He coordinated the Spanish Network of Cell Therapy (TerCel), and served as President of the Spanish Society of Hematology and Hemotherapy (2013–2016). He was scientific expert for the EMA and AEMPS, and a member of the External Affairs Committee of the European Hematology Association. He has published 192 peer-reviewed papers, edited five books, and authored 98 book chapters.



### Pr. SALVADOR MARTÍNEZ PÉREZ

Salvador Martínez Pérez is a Spanish neuroanatomist and embryologist whose work sheds light on early brain development and its molecular control. He has served as Professor of Human Anatomy and Embryology since 2004 at the Universidad Miguel Hernández de Elche/Instituto de Neurociencias, where he also directed the institute from 2016 to 2020. Trained in Medicine at the University of Murcia (MD 1985; PhD 1987), he completed research stays at La Salpêtrière (INSERM, Paris) and UCSF. His research focuses on how morphogens shape brain regionalization and morphogenesis, as well as neurovascular interactions during development. He has explored stem cell approaches in models of ALS, ataxia, and multiple sclerosis. Martínez has coordinated major international annotation programs (EUREXPRESS, EUCOMMTOOLS, Allen Brain Atlas), supervised many theses and earned awards, including the "Alberto Sols" career prize. With dozens of Q1 publications and a high citation impact (h-index ~59), he remains a key figure linking developmental neurobiology with translational neuroscience.



### **Virginie BARTHEL**

Virginie Barthel has over 17 years of experience in clinical development and operations, having refined her expertise across both Contract Research Organizations (CROs) and dynamic biotech environments. With strong knowledge in cell and gene therapy, she has held leadership and operational roles, advancing innovative clinical initiatives. She currently supports biotech companies in their early clinical development phases, using her extensive background to navigate the complexities of this critical stage. Since 2007, Virginie has been a lecturer in the Master's program Management of Clinical Operations at Montpellier University, where she shares her expertise and trains the next generation of clinical research professionals. She is also a frequent speaker at international meetings, contributing to the global dialogue on innovation in clinical research.

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09:30 am - 10:00 am Registration and Welcome

### 10:00 am - 10:30 am Opening Remarks

- President of the Private University of Marrakesh
- Dean of the Private Faculty of Medicine of Marrakesh
- President of MSRT
- Symposium Chair

10:30 am - 13:00 pm Scientific Session

10:30 am - 11:00 am

"iPSC: Expanding the arsenal from curative transplants to regenerative therapies"

#### Speaker Prof. José Maria MORALEDA-JIMENEZ

Director, Hematology Department & Stem Cell Transplant Unit University Hospital Virgen de la Arrixaca, Murcia, Spain

11:00 am - 11:30 am

"Scientific and regulatory prospects for the clinical application of iPSC-derived products in the EU"

### Speaker Pr. SALVADOR MARTÍNEZ PÉREZ

Professor of Human Anatomy and Embryology Universidad Miguel Hernández de Elche / Instituto de Neurociencias, Elche, Spain

11:30 am - 12:00 pm

Regulatory and technical challenges for implementing innovative therapy in Morocco-The case of CART-Cell therapy

### Speaker Prof. Mhamed HARIF

President, Moroccan Society of Hematology Casablanca, Morocco

### 12:00 pm - 12:30 pm

Requirements and challenges of stem cell therapy clinical development

### Speaker Ms. Virginie BARTHEL

Clinical Operations & Development Expert NeoAlchemy Clinical, Louvain-la-Neuve, Wallonia Region, Belgium

12:30 pm - 01:00 pm Discussion and Recommendations

01:00 pm - 01:30 pm Closing of the Symposium







Symposium – Induced Pluripotent Stem Cells in Morocco: Opportunities, Challenges, and Perspectives October 7, 2025 – Marrakesh, Morocco

