

## Faculty

**José De Andrés MD, PhD, FIPP, EDRA, EDPM**

Anesthesiologist  
Professor of Anesthesia, Valencia University Medical School.  
Chairman, Department of Anesthesiology and Critical Care.  
Director of Multidisciplinary Pain Management Center.  
General University Hospital, Valencia, Spain.

**Sudhir Diwan, MD, PhD**

Anesthesiologist  
Executive Director, Manhattan Spine and Pain  
Medicine Associate Clinical Professor, Albert Einstein  
College of Medicine Attending Lenox Hill Hospital.  
New York, USA

**Jose Luis Durá MSc**

Electronic Engineer.  
Polytechnic College, Valencia, Spain

**Leonardo Kapural, MD**

Anesthesiologist  
Carolinas Pain Institute,  
Winston Salem, North Carolina, USA

**Andrzej Krol, MD, DEEA, FRCA, FFMRCR, EDPM**

Anesthesiologist  
Department of Anesthesiology  
St. George's University Hospitals, London, UK

**Scott Lempka**

Biomedical Engineering  
Department of Anesthesiology, University of Michigan  
Ann Arbor, Michigan, USA

**Maarten Moens, MD**

Neurosurgeon  
Department of Neurosurgery, Universitair Ziekenhuis  
Brussels

Center for Neurosciences (C4N), Vrije Universiteit Brussel  
(VUB) Brussels, Belgium

**Ilona Obara MSc, PhD, SFHEA**

Neuroscientist  
Reader in Pain Pharmacology and Neuroscience Director of  
Research.

School of Pharmacy, Faculty of Medical Sciences  
Newcastle University, King George VI Building

Newcastle upon Tyne, UK

**Alejandro Ortega, MD**

Anesthesiologist  
Department of Anesthesiology Hospital Asepeyo.  
Madrid, Spain

**Albert Prats, MD, PhD**

Professor of Anatomy  
Anatomy Department  
University of Barcelona, Barcelona Spain

**Philippe Rigard, MD, PhD**

Neurosurgeon  
Department of Spine Surgery & Neuromodulation,  
Poitiers University Hospital, 86021 Poitiers, France

**Pedram Tabatabaie, MD, PhD**

Neurosurgeon.  
Head Neuromodulation Unit  
Norrlands University Hospital  
Umeå, Sweden

**Jean Pierre Van Buyten, MD**

Anesthesiologist  
Pain Clinic AZ Maria Middelaars  
Sint-Niklaas, Belgium

**Kate Vincent Jones**

Biomedical Engineering Texas  
A&M University College Station, TX, USA.

## GENERAL INFORMATION

### DATES AND LOCATION

November, 22nd-23rd, 2024. Barcelona, Spain

### LECTURES:

Clinic University Hospital . Villarroel 170.

08036 Barcelona, Spain.

Sala de Actos. Left Wing from main entrance in Villarroel

Street 170. Take the Stairs number 9 to 11. 3rd Floor.

### CADAVER. HANDS-ON DEMONSTRATION:

Dissection Room. Department of Anatomy, Barcelona University  
Medical School. Underground floor. Main entrance from Casanova  
Street 143.

### Course Director

Prof. Jose De Andrés

Professor of Anesthesia, Valencia University Medical School  
Chairman, Department of Anesthesiology and Critical Care  
Director of the Multidisciplinary Pain Management Center  
Valencia University General Hospital.

Tres Cruces s/n, 46014-Valencia (Spain)

Prof. Albert Prats

Professor of Anatomy, Barcelona University Medical School.  
Casanova, 143. 08036 Barcelona, Spain.

Dr. Xavier Sala-Blanch

Associate Professor of Anesthesia.

Barcelona University Medical School

Department of Anesthesiology and Reanimation

Hospital Clinic i Provincial

Villarroel 170. 08036 Barcelona. Spain

Course Co-Director

Gustavo Fabregat, MD, PhD

### TARGET AUDIENCE

This advanced course is designed for pain practitioners (pain  
specialists, anesthesiologists, neurosurgeons) utilizing invasive  
techniques for pain management.

Physicians attending the course should have at least 2 years of  
practice with ongoing use of neuromodulation techniques in the  
treatment of chronic pain patients.

### OBJECTIVES

After participation in this educational meeting, participants should  
have an understanding of:

1. Basic neuroanatomy related with the performance of pain  
therapies.

2. Clinical evidence regarding new and evolving treatments for the  
treatment of pain.
3. Current imaging and electrophysiological technologies relevant  
for performing diagnosis and performing the invasive techniques  
for pain treatment.
4. Common clinical problems in chronic pain and current recom-  
mendations for the evaluation and management of these pain  
conditions.
5. Evidence-Based treatments in pain medicine.
6. Identify questions that need to be addressed to increase  
knowledge of neuromodulation techniques use in pain  
treatment.
7. How to design the Pain studies for obtaining better the evidence.

### ACCREDITATION

An Application has been made to the EACCME® for CME accredi-  
tation of this event

### REGISTRATION

REGISTRATION: 1800 €

Complete information at:

[www.academyfundolor.org/en/registracion](http://www.academyfundolor.org/en/registracion)

The fee includes:

- Registration
  - Conference package
  - Meals (2 work lunches + 1 dinner)
  - Accommodation (bed&breakfast) -2 nights
- Each delegate is responsible of travel arrangements

NEXT COURSE:

COURSE 21st.

November 21st-22nd, 2025

**Our gratitude for the collaboration given by the following  
companies:**

ABBOTT  
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## ADVANCED PAIN CADAVER COURSE



## NEUROSTIMULATION-COURSE 20th

November 22th-23rd, 2024

Barcelona, Spain

## CLINICAL & BASIC SCIENCE FOR THE MANAGEMENT OF THE CHRONIC PAIN PATIENT

Organised by:



ANESTHESIOLOGY ACADEMIC AREA  
DPT OF SURGERY AND SURGICAL SPECIALITIES.  
HUMAN ANATOMY AND EMBRIOLOGY UNIT.  
UNIVERSITY OF BARCELONA

Under the auspicious of



Course Organiser:

ACADEMY FUNDOLOR

Cristina Cruz

Multidisciplinary Pain Management Department

Anesthesia Department

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MORE INFORMATION ON [www.academyfundolor.org](http://www.academyfundolor.org)

Day 1 - Friday 22nd November 2024  
BASIC SCIENCE

Time	Session	Faculty
08.00-08.15	<b>Introduction and Welcome</b>	José De Andrés Albert Prats
08.15-09.30	<b>ANATOMY FOR PAIN CLINICIANS</b>	
08.15-09.00	Anatomy for Spine procedures	Albert Prats
09.00-09.25	Applied Anatomy for the practice of spinal cord and DRG neuro-modulation	Jose De Andres
09.30-13.30	<b>NEUROBIOLOGY and PHYSIOLOGY FOR PAIN CLINICIANS</b>	
09.30-09.55	Mechanisms of action of spinal cord stimulation – lessons learned from pre-clinical studies	Ilona Obara
10.00-10.25	Physiological Effects and Mechanisms of Action of Spinal Cord Stimulation to Treat Pain. Optimization of Spatial Targeting and System programming and its influence on results.	Scott Lempka
10.30-11.00	<b>Break</b>	
11.00-11.25	Improving SCS clinical Outcome with Patient Specific Physiological Monitoring: Closed-loop to Normalize the Pathological activity associated with Chronic Pain	Ilona Obara
11.30-11.55	Electrophysiology of the Human DRG. Mechanisms of Dorsal Root Ganglion. Stimulation in Pain Suppression: A Computational Modeling	Scott Lempka
12.00-12.25	Functional Magnetic Resonance Imaging showing supraspinal Effects of spinal cord stimulation on brain	Maarten Moens
12.30-12.55	Patient profiling Using Objective Genomics and Proteomics expression to predict positive long-term outcomes in patients with implanted Neurostimulation Systems	Gustavo Fabregat
13.00-13.30	Technology at the service of clinicians. Artificial Intelligence and the concept of "Machine Learning" and its application in improving results	Philippe Rigoard
15.00-20.00	<b>CADAVER. HANDS-ON DEMONSTRATION</b>	
	<b>1. Neuromodulation with ECAP</b>	Leo Kapural
	<b>2. Percutaneous ANTEROGRADE lead paraspinal</b> All-in-one (single stage) approach. Tunnelling and pocket creation	Jean Pierre Van Buyten Maarten Moens
	<b>3. Percutaneous RETROGRADE lead paraspinal insertion.</b> Pelvic and perineal stimulation for somatic and visceral pain	Sudhir Diwan
	<b>4. DRG neuromodulation lead insertion</b> Percutaneous Endoscopic Navigation Cadaver Station	Pedram Tabatabaie
	<b>5. Ultrasonography Station</b> Spine structures identification for the practice of SCS neurostimulation Transversus abdominis Plane (TAP) block with Ultrasonography guidance for field anesthesia in IPG implant	Andrzej Krol
	<b>6. PNS insertion with US guidance</b>	Alejandro Ortega
	<b>7. Technical Station</b> Devices and programming	Jose Luis Durá Kate Vincent Jones
20.00	Closing of the Day	
20.30	Dinner	

Day 2 - Saturday 23rd November 2024  
CLINICAL SCIENCE

Time	Session	Faculty
08.15-10.00	<b>TECHNICAL SECTION</b>	
08.15-08.55	Outcome Prediction to Optimize Patient and Device Selection in Spinal Cord Stimulation (SCS). Different processes if Trial versus No Trial for Spinal Cord Stimulation? USA view 15 min EUROPE view 15 min <i>Practical interactive approach</i>	Leo Kapural Maarten Moens
09.00-09.25	Glial cells: their role in neuroinflammation and possibilities for modulation and results in clinical practice. Indications for Differential target multiplexed spinal cord stimulation. <i>Practical interactive approach</i>	Jean Pierre Van Buyten
09.30-09.55	The clinician faced with his obligation to prescribe the technology and program it. Combination therapy approach having waveforms focused on different mechanisms of action. <i>Practical interactive approach</i>	Philippe Rigoard
10.00-10.25	Neuromodulation with electrical field stimulation of dorsal root ganglion in various pain syndromes. Technical approach for best outcome. Mononeuropathy vs Polyneuropathy. Guidelines for specific programming <i>Practical interactive approach</i>	Pedram Tabatabaie
10.30-11.00	<b>Break</b>	
11.00-13.30	<b>DISEASE SPECIFIC PAIN ASSESSMENT AND MANAGEMENT</b>	
11.00-11.30	Neuromodulation for chronic back and leg pain in virgin back patients. It is affordable? Patient selection from clinical diagnosis to Implant USA view 15 min EUROPE view 15 min <i>Practical interactive approach</i>	Sudhir Diwan Jean Pierre Van Buyten
11.30-11.55	Refractory Chronic Back and/or Lower Limb Neuropathic Pain Are SCS and DRG possible combined therapies? <i>Practical interactive approach</i>	Philippe Rigoard
12:00-12:25	Why is Neuromodulation Effective in Complex Regional Pain Syndrome (CRPS)? <i>Practical interactive approach</i>	Jean Pierre Van Buyten
12.30-12.55	Neuroinflammation in visceral pain. Etiology of a Clinical Problem That Is Difficult to Solve <i>Practical interactive approach</i>	Leo Kapural
13.00-13.30	Chronic Pelvic & Perineal pathologies: Pain and Sexual Dysfunction in Men and Women: Does Neuromodulation Play a Role? <i>Practical interactive approach</i>	Sudhir Diwan
13.30-13.55	Learning Cases Scenarios. Interactive discussion <i>Practical interactive approach</i>	Jose De Andrés
13.30-13.35	<b>Closing Remarks</b>	José De Andrés
14.00-15.30	<b>Lunch</b>	
15.30	<b>Departures</b>	