



# V EDITION OF THE THEORETICAL AND PRACTICAL WORKSHOP FOR UPDATE IN ULTRASOUND AND MULTIDISCIPLINARY APPROACH FOR VASCULAR ACCESS



**April 5-6, 2016**

**Sabadell, Barcelona**







## INTRODUCTION AND OBJECTIVES

The progressive incorporation of ultrasound for early diagnosis of vascular access pathology requires a multidisciplinary approach (nephrologists, vascular surgeons, radiologists, & nurses) to optimize resources.

The course is aimed at nephrologists, vascular surgeons, radiologists and specialists-in-training who have experience in ultrasound for vascular access or who have completed the previous course on ultrasound for vascular access.

It will help professionals bring their knowledge up to date and improve their skills.

We also offer a symposium after the workshop, the 1<sup>st</sup> Parc Taulí International Vascular Access Symposium. The Symposium has three main objectives: to review the current state of the evidence in main issues related to vascular access, to highlight the trending topics by international experts, and to give professionals of different areas of interest the opportunity to present their experiences with abstract submissions.

## METHODOLOGY

1. Review of the theory of the physical principles of ultrasound applied to different hemodynamic models of vascular access.
2. Theoretical and practical sessions on ultrasound mapping and diagnosis of vascular access pathology. From the simple to the complex.
3. Representative clinical cases and clinical cases for students to solve in the interactive electronic student self-assessment sessions.
4. HANDS-ON SESSIONS on vascular access ultrasonography  
From classroom simulation to ultrasound examinations done by students. Hands-on practice with patients with normal vascular access and with different types of pathology (stenosis, thrombosis, aneurysms, deep veins, etc.), giving students the opportunity to apply the theoretical knowledge they have acquired. Different models of ultrasound devices will be used.
5. On previously mapped vascular access, surgery transmitted live from the operating room.
6. HANDS-ON SESSIONS on ultrasound-guided venipuncture.  
Study of cervical and femoral human anatomy in patients. From classroom simulation to the examinations done by students. Ultrasound-guided puncture for central line placement on simulation models. Review of techniques and approaches (human torso, phantom, and biological models such as turkey). Temporary and tunneled catheter placement, from puncture to the tunnel creation.



## ORGANIZATION COMMITTEE

José Ibeas, MD, PhD. Nephrology

Joaquim Vallespín. MD. Vascular Surgery

José Ramón Fortuño, MD. Interventional Radiology

Hospital de Sabadell, Corporació Sanitària Parc Taulí. Sabadell, Barcelona

## SCIENTIFIC COORDINATION

José Ibeas, MD, PhD.

Nephrology

Hospital de Sabadell, Corporació Sanitària Parc Taulí

## WITH SUPPORT OF:

- Centro de Educación Médica basada en la Simulación. Parc Taulí Sabadell, Hospital Universitari
- Catalan Society of Nephrology and its Working Group of Vascular Access
- Spanish Society of Nephrology
- GEMAV Spanish Multidisciplinary Working Group on Vascular Access
- Catalan Society of Angiology, Vascular and Endovascular Surgery
- Spanish Society of Angiology and Vascular Surgery
- Spanish Society of Dialysis and Transplant
- Vascular Access Society
- European Renal Association – European Dialysis and Transplantation Association
- International Society of Nephrology

## ACCREDITATION



Has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. **12 European CME credits** (ECMEC).



Activitat acreditada pel Consell Català de Formació Continuada de les Professions Sanitàries - Comisión de Formación Continuada del Sistema Nacional de Salud. Pending



## ACCOMMODATION

Gran Hotel Verdi \*\*\*\*

C/ Francesc Macià, 62

08206 – Sabadell

Room /day: 75 eur + VAT (breakfast included)

Reservations and payment for accommodation must be made through the course secretary.

## COURSE VENUE

Auditorium Taulí nou

Corporació Sanitària Parc Taulí

Parc Taulí, 1

08208 Sabadell



## COURSE SECRETARIAT

Ester Freixa  
Fundació Parc Taulí  
E-mail [efreixa@tauli.cat](mailto:efreixa@tauli.cat)

### Registration

For Registration, send an e-mail [efreixa@tauli.cat](mailto:efreixa@tauli.cat)

### Price in Euros (VAT not included)

	WORKSHOP	SYMPOSIUM	COMBO
Early Before Dec 1, 2015	550 Resident/Fellow 450	350 Resident/Fellow/Nurse 250	725 Resident/Fellow 525
Advance Before Feb 15, 2016	650 Resident/Fellow 550	425 Resident/Fellow/Nurse 325	900 Resident/Fellow 700
Late	750 Resident/Fellow 650	500 Resident/Fellow/Nurse 400	1075 Resident/Fellow 875

Includes:

- Course attendance, documentation pendrive, coffee breaks, lunch and certificate of attendance.
- **Membership discount in the Vascular Access Society for the first year, which includes electronic subscription to the Journal of Vascular Access.**

Limited, to 24 students. Places will be assigned in function of the order of registration.

### Cancellation:

Up to 10 days before the course starts, after this date, the registration fee will not be refunded.

### Payment

Bank transfer to: Banc de Sabadell  
IBAN: ES69-0081-5154-22-0002103622  
SWIFT: BSABESBB



# PROGRAM



# APRIL 5

**07:45 – 08:00 h** Registration

---

**08:00 – 09:00 h** Welcome and opening of the course  
*Cristina Carod, MD*  
*Executive Director Hospital de Sabadell and Albada*  
*Corporació Sanitària Parc Taulí*

*Dr. Jaume Almirall*  
*Director del Servicio de Nefrología*

---

**Introduction and course objectives**  
*José Ibeas López, MD, PhD*

---

**Multidisciplinary management of vascular access: the importance of resource management**  
*Antonio Giménez Gaibar, MD*

---

**Clinical application of second-generation screening methods in the diagnosis of vascular access stenosis**  
*Ramón Roca Tey, MD, PhD*

---

**09:00 - 10:30 h** **From the physical principles of Color Doppler ultrasound to technical optimization. Adaptation to vascular access hemodynamics**  
*Jana Merino Raldúa, MD, PhD*

Practical use:

- B Mode
  - Color Doppler and Power Doppler
  - Spectral Doppler
  - Settings: from PRF to SVP
  - Flow measurement: how to avoid mistakes
  - ***Clinical Cases***
  - ***Clinical problems: how to avoid mistakes, Self-assessment***
- 

**10:30 – 11:00 h** **Ultrasonography, from theory to clinical practice: tips, tricks, and a quiz**  
*Jan Malik*

---

**11:00 – 11:30 h** Coffee break

---



**11:30 – 13:00 h Presurgical mapping:**

*Joaquim Vallespín Aguado, MD*

- Ultrasound anatomy of arterial and venous vascular tree: outline of systematic mapping
  - From the morphological study to the hemodynamics
  - Mapping for the first AVF
  - Mapping of patients with complex vascular beds
  - Mapping oriented to VA reconstruction
  - Indications for angiography
  - ***Clinical cases and Self-assessment***
- 

**13:00 – 14:30 h Pathological vascular access**

*José Ibeas López, MD, PhD*

- Outline of the systematic physical examination of the VA
  - Outline of the systematic ultrasound study of pathological VA
  - Diagnosis of stenosis: from moderate to critical
  - Diagnosis of thrombosis: Approach to the identification of candidates for treatment
  - Value of flow in decision making
  - Mapping strategy for dysfunctional AVF puncture awaiting treatment
  - The AVF with moderate stenosis: conservative management approach by US surveillance
  - ***Clinical Cases***
  - ***Clinical problems: Self-evaluation***
- 

**14:30 – 15:30 h Lunch**

---

**WORKSHOP**

**15:30 – 16:30 h Simulation Lab applied to arteriovenous fistula**

---

**16:30 – 20:00 h Hands On. Ultrasound VA assessment in patients**

**1. Pathological and Nonpathological VA**

- Developing arteriovenous fistula
- Medium Flow arteriovenous fistula
- High flow arteriovenous fistula
- Arterioveonus fistula stenosis
- Graft
- Aneurysms
- Deep Veins

**2. Presurgical mapping**

- Candidate for first AVF with vessels preserved
- Candidate for first AVF with arteriopathy
- Candidate for AVF with poor venous bed
- Candidate for VA reconstruction



# APRIL 6

**09:00 – 13:00 h Workshop discussion based on the case.**

**Discussion of clinical cases and live surgery in parallel**

1. Clinical cases
2. Live surgery

---

**13:00 – 14:00 h Lunch**

---

**14:00 – 15:00 h Ultrasound-guide puncture in central vessels. Review of techniques and approaches**

*José Ibeas López, MD, PhD*

- Review to optimize the use of ultrasound in the puncture of central lines
- Vascular anatomy. Anatomic variants
- Ultrasound-guided puncture: different approach techniques:
  - In plane and out of plane
  - Combinations of longitudinal, transverse, and oblique approaches

---

**15:00 – 16:00 h Simulation Lab: ultrasound-guided catheter placement**

---

**16:00 – 19:00 h Workshop ultrasound practice on real patients and simulation models**

- Exploration in anatomical human model:
  - Normal anatomy and variants
  - Jugular and femoral areas
  - Complex approach
- Training on simulation models. Ultrasound-guided puncture in:
  - Simulated Human Torso
  - Phantom
- Training in ultrasound-guided short-term and tunnelled catheter placement with different approaches:
  - Biological model (turkey)
- Training in ultrasound-guided catheter placement and temporary tunnelled catheter with different approaches:
  - Plane
  - Out of plane
  - Combination of transverse and oblique

---

**19:30 h Workshop closing**

---



## FACULTY

**Loreley Ana Betancourt, MD.** Nephrology. Corporació Sanitària Parc Taulí

**M<sup>a</sup> Isabel Bolos, MD.** Nephrology. Corporació Sanitària Parc Taulí

**Ivan Constenla, MD.** Vascular Surgery. Corporació Sanitària Parc Taulí. Hospital Vall d'Hebron, Barcelona  
Certificate of noninvasive vascular diagnosis (CDVNI) of the Spanish Society of Angiology and Vascular Surgery.

**José Ramón Fortuño, MD.** Interventional Radiology. UDIAT. Corporació Sanitària Parc Taulí. Vascular Vascular  
Access Group of the Spanish Society of Interventional Radiology.

**Juan Carlos Gil, MD.** Interventional Radiology. UDIAT. Corporació Sanitària Parc Taulí

**Dr. Josep Guitart, MD.** Interventional Radiology. UDIAT. Corporació Sanitària Parc Taulí

**Antonio Gimenez Gaibar, MD.** Chief of Vascular Surgery Department. Corporació Sanitària Parc Taulí. Past-  
President of the Catalan Society of Angiology and Vascular and Endovascular Surgery. Past-Vice- president of  
the Spanish Society of Angiology and Vascular Surgery. Spanish Multidisciplinary Working Group on Vascular  
Access (GEMAV).

**Elena González, MD.** Coordinator of the Vascular Surgery Department Corporació Sanitària Parc Taulí.  
Certificate of noninvasive vascular diagnosis (CDVNI) of the Spanish Society of Angiology and Vascular Surgery.

**Carol Herranz, MD.** Vascular Surgery. Corporació Sanitària Parc Taulí. Certificate of noninvasive vascular  
diagnosis (CDVNI) of the Spanish Society of Angiology and Vascular Surgery.

**José Ibeas, MD, PhD.** Nephrology. Corporació Sanitària Parc Taulí. Vascular Access Workgroups of the Catalan  
and Spanish Societies of Nephrology. Interventional Nephrology Workgroup of the Spanish Society of  
Nephrology. Spanish Multidisciplinary Working Group on Vascular Access (GEMAV). Council member of the  
Vascular Access Society. International Committee of the American Society of Diagnostic and Interventional  
Nephrology.

**Jan Malik, MD, PhD.** Third Department of Internal Medicine, General University Hospital and First Faculty of  
Medicine, Charles University, Prague, Czech Republic. President elect of the Vascular Access Society

**Jana Merino, MD, PhD.** Vascular Surgery. Corporació Sanitària Parc Taulí. Certificate of noninvasive vascular  
diagnosis (CDVNI) of the Spanish Society of Angiology and Vascular Surgery.

**Ramón Roca, MD, PhD.** Nephrology. Mollet Hospital. Barcelona. Coordinator of the Vascular Access  
Workgroups of the Catalan and Spanish Multidisciplinary Working Group on Vascular Access (GEMAV).  
Interventional Nephrology Workgroup of the Spanish Society of Nephrology . Board of *Vascular Access Society*.

**Dr. Laura Rodriguez.** Cirugía Vascular. Corporació Sanitària Parc Taulí. Certificado CDVNI

**Marta Santos, MD.** Vascular Surgery. Corporació Sanitària Parc Taulí. Certificate of noninvasive vascular  
diagnosis (CDVNI) of the Spanish Society of Angiology and Vascular Surgery.

**M.Pau Valenzuela, MD.** Nephrology. Corporació Sanitària Parc Taulí

**Joaquim Vallespín, MD.** Vascular Surgery. Corporació Sanitària Parc Taulí. Certificate of noninvasive vascular  
diagnosis (CDVNI) of the Spanish Society of Angiology and Vascular Surgery. Spanish Multidisciplinary Working  
Group on Vascular Access (GEMAV). Secretary of the Vascular Access Section of the Spanish Society of  
Angiology and Vascular Surgery



**SPONSORIZED BY:**



***General Electric***

**BAIRD**

**TOSHIBA**

**Leading Innovation >>>**



**COVIDIEN**

**mindray**

NEPHRO  
*Cloud*

