

# HANDS-ON WORKSHOP IN VASCULAR ULTRASOUND

Bellvitge University Hospital, BARCELONA (Spain)  
May, 7-9<sup>th</sup>, 2025

 **esvs**  
Academy



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## KEY BENEFITS

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The course provides a thorough grounding in the clinical skills to work in vascular ultrasound.

During the course, participants are presented with an intensive series of short lectures focussed on technical aspects of the different US examinations.

Classroom teaching is supplemented by sessions at the Vascular Laboratory, where participants have the opportunity to practice their skills under supervision on patients with relevant disease and homemade puncture models for US-guided puncture. The course includes 60% of time on hands-on on machines and real patients, in several vascular ultrasound disciplines.

The workshop is addressed mainly to novice trainees and to those willing to prepare for the CCVUS examination.

## E-LEARNING MODULE

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Before attending the course, participants will have access to an online blended learning module that will introduce them to the basic knowledge of ultrasound and the standards of the different examinations.

The e-learning module includes:

- all presentations of previous editions
- locuted PowerPoint of each issue
- a quiz that helps to review basic concepts of US physics, the anatomy of commonly examined areas, and the most important diagnostic criteria.
- a forum open to questions from all participants.
- a survey about previous US experience that will help us to prepare the groups for the workshop

This preparatory module is intended as a tool to save time in lectures, allowing more time for hands-on practice. It will open 15 days before the course and close one month after it. Registered participants will receive access instructions before April, 19<sup>th</sup>.

## REGISTRATION

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The registration fee is €800 for ESVS members and €1000 for non-members. It includes course materials, coffees, lunches and a course dinner on May, 7<sup>th</sup>. Transport, accommodation, and additional meals are not included.

## VENUE

The course will be held at the University Building and Vascular Laboratory of Hospital Universitari de Bellvitge, Barcelona (Spain). It will be in English.

Bellvitge University Hospital is located between Barcelona city center and the airport.


<https://bellvitgehospital.cat/ca/on-som/accessos>

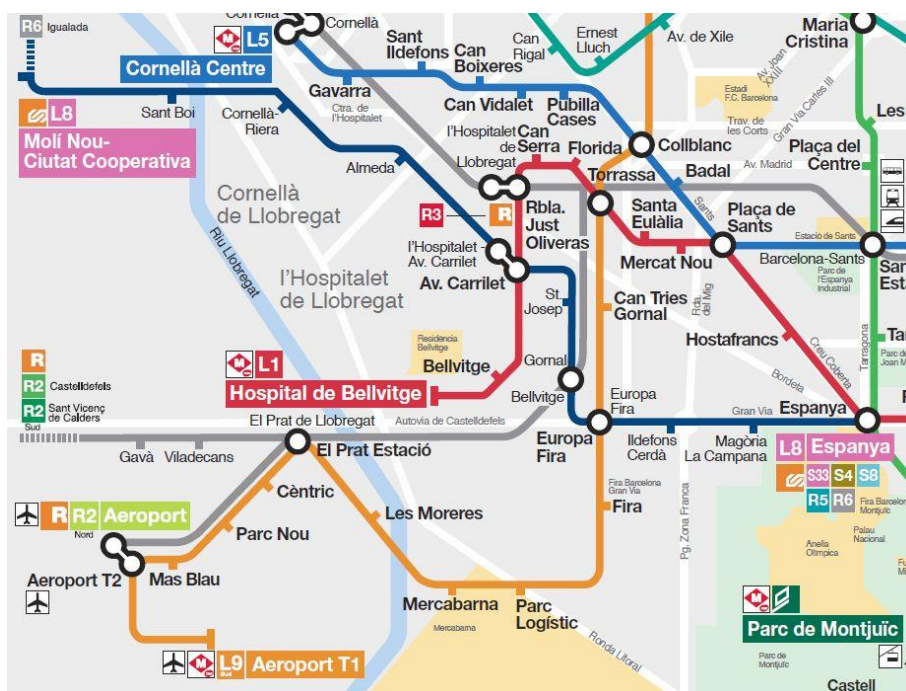
### From the airport :

With public transport, you should take bus N<sup>o</sup> 46 from terminal 1 and get off at the “Gran Via-Hospital Prnceps d’Espanya” stop and cross the highway using the subway pedestrian crossing. There is a bus every 20 minutes from 5:30 AM till 12:00PM, bus journey takes approximately 10min. On arrival at the airport follow the signs to public bus stops below the arrival Hall of Terminal 1 or outside Terminal 2. Tickets can be bought directly on the bus. For more information, you can check the TMB web site :

<http://www.tmb.cat/en/linia-de-bus/-/bus/46>



From Terminal 1 or Terminal 2, you can also take the Metro (subway), just follow the signs to Line 9 station  from the Arrival Hall of both terminals and take any train to Zona Universitaria. You will have to switch to Line 1 at Torrassa Station and take a train towards Hospital de Bellvitge.





A taxi from terminal 1 to the Hospital will take 5 minutes and cost less than 25€.

### From Barcelona city centre:

Take the Metro (subway). The last stop of Line 1 (red) is Hospital de Bellvitge. There is only one exit located inside the hospital premises. More info:

<http://www.tmb.cat/en/detall-linia-metro/-/linia/L1>

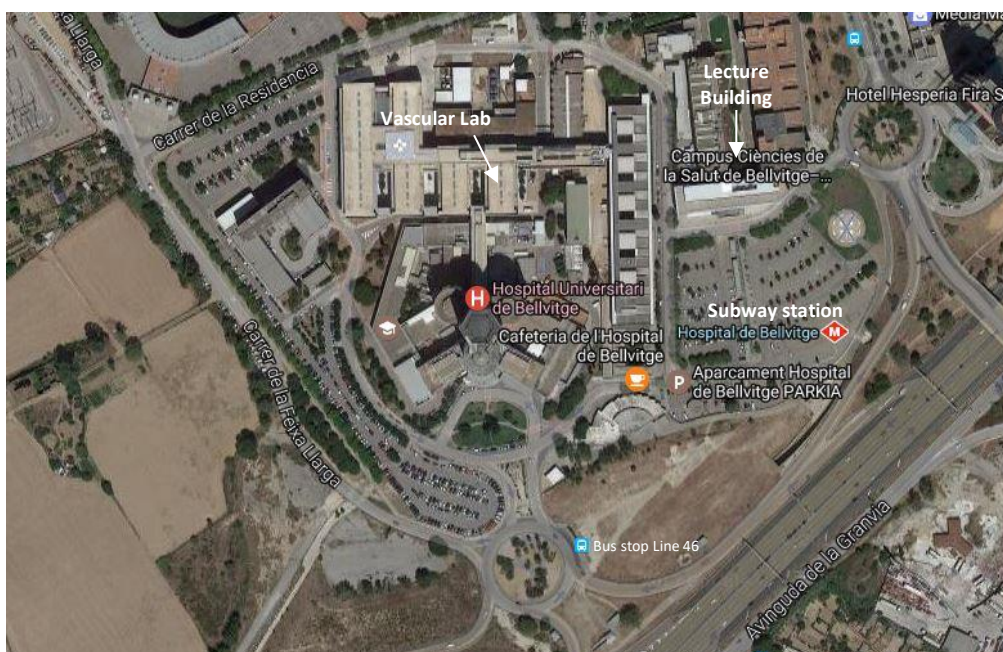
Bus Nº 46 on its way from España Sq. to the airport stops at the Hospital and in front of the University Building.

### Location of the course:

Registration and morning sessions of the course will be situated in a **classroom** of the Lecture building at the UB University Campus - Bellvitge. There will be signs at the entry of the building announcing the course and classroom.

Hands-on sessions will be held in the Vascular Lab (Module D, 1<sup>st</sup> floor) located less than 200 m. from the university building.

<http://maps.google.es/maps?hl=es&ll=41.344719,2.106736&spn=0.005477,0.012392&t=m&z=17>



Meals will be delivered in the form of bags with food to be consumed in the gardens of the faculty campus at the UB University Campus-Bellvitge.

## HOTEL ACCOMMODATION

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Barcelona has a big offer of hotels, although they are rather busy in May. We recommend booking as early as possible to get better rates. The most convenient and closest hotel to the Hospital is Hesperia Barcelona Fira Suites.

<https://www.hesperia.com/en/hoteles/spain/barcelona/hotel-hesperia-barcelona-fira-suites>

## COURSE DINNER

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An informal dinner is planned on the first evening (Wednesday 7<sup>th</sup> ) at a restaurant in the city center near Las Ramblas. No transportation will be provided. Participants will have to reach the restaurant on their own.

## FACULTY

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Convenors:	Elena Iborra MD. PhD. Head Vascular Surgery Dept. Hospital Universitari Bellvitge
	Jonas P. Eiberg MD. PhD, Prof., Dept. Vasc Surg, Rigshospitalet, Copenhagen, Denmark
	F. Xavier Marti MD. PhD. Vascular Surgeon Hospital Universitari Bellvitge
Tutors:	Kim Bredahl MD, PhD. Vascular Surgeon Rigshospitalet, Copenhagen, Denmark
	Malka Huici MD. Vascular Surgeon Hospital Universitari Bellvitge
	M. Ángeles Menéndez MD. Vascular Surgeon Hospital Central de Asturias (Oviedo)
	Ramon Vila MD. Past Head Vascular Surgery Dept. Hospital Universitari de Bellvitge
	Ana Arribas MD. Vascular Surgeon. Hospital Fundación Jiménez Díaz (Madrid)
	Carles Martinez Rico MD, PhD. Vascular Surgeon. Hospital Universitari Bellvitge
	Begoña Gonzalo MD. Vascular Surgeon. Hospital Universitari de Bellvitge
	Emma Espinar MD. Vascular Surgeon. Hospital Universitari de Bellvitge
BLM Tutor :	Gaspar Mestres MD. PhD. Vascular Surgeon. Hospital Clínic (Barcelona)

## PROGRAMME

	Wednesday, May the 7th	Time	Thursday, May the 8th	Time	Friday, May the 9th
8:00	Registration & Welcome	8:00	Arterial physiology & hemodynamics A. Arribas	8:00	Hands-on 8 PAT <i>On course participants</i>
8:15	Introduction to the course E. Iborra / X. Martí	8:15		8:15	
8:30	Principles & instruments of Doppler ultrasound J. Eiberg	8:30	Carotids & carotid stent E. Espinar	8:30	
8:45		8:45		8:45	
9:00	<i>Pause</i>	9:00	<i>Pause</i>	9:00	<i>Pause</i>
9:15	Knobology A. Arribas	9:15	AAA & aortoiliac mapping K.Brehdal	9:15	Hands-on 9 Arterial <i>On patients</i>
9:30		9:30		9:30	
9:45	US artifacts X. Martí / R. Vila	9:45	EVAR follow up E. Iborra	9:45	
10:00		10:00		10:00	
10:15	US guided puncture C. Martínez	10:15	<i>Pause</i>	10:15	<i>Pause</i>
10:30		10:30	Infrainguinal mapping: Lower limb revasc. without angio X. Martí	10:30	Hands-on 10 AVF <i>On patients</i>
10:45	<i>Pause</i>	10:45		10:45	
11:00	Venous physiology & haemodynamics R. Vila	11:00	Pedal acceleration time: An alternative to ABI M. Huici	11:00	
11:15		11:15		11:15	
11:30	Varicose veins M.A. Menéndez	11:30	Lower limbs follow-up C.Martinez	11:30	<i>Pause</i>
11:45		11:45		11:45	Debriefing
12:00	Deep venous thrombosis <i>Theory &amp; demo</i> M.A. Menéndez	12:00	<i>Pause</i>	12:00	Evaluation Multiple choice test Results of test
12:15		12:15	Miscellaneous <i>Diagnostic &amp; follow-up algorithms/Minimum training requirements/Choice of equipment</i> J. Eiberg	12:15	
12:30	AV fistula planning & follow-up <i>Theory &amp; demo</i> B. Gonzalo	12:30		12:30	
		12:45		12:45	
13:00	Wrap-up first day Theory	13:00	Wrap-up second day Theory	13:00	
13:15		13:15		13:15	<i>Course ends</i>
13:30	<i>Lunch</i>	13:30	<i>Lunch</i>		
13:45		13:45			
14:00		14:00			
14:15	Hands-on 1 Buttons, knobs, transducers & settings <i>On course participants</i>	14:15	Hands-on 5 Arterial <i>On patients</i>		
14:30		14:30			
14:45		14:45			
15:00	<i>Pause</i>	15:00			
15:15		15:15	<i>Pause</i>		
15:30	Hands-on 2 Venous <i>On patients</i>	15:30			
15:45		15:45	Hands-on 6 Arterial <i>On patients</i>		
16:00		16:00			
16:15	<i>Pause</i>	16:15			
16:30		16:30	<i>Pause</i>		
16:45	Hands-on 3 Venous <i>On patients</i>	16:45			
17:00		17:00	Hands-on 7 Arterial <i>On patients</i>		
17:15		17:15			
17:30	<i>Pause</i>	17:30			
17:45		17:45			
18:00	Hands-on 4 AVF <i>On course participants</i>	18:00			
18:15		18:15			
18:30		18:30			
20:00	<i>Networking dinner</i>				