



Advanced Training Course in **Lung Transplantation**

20^{**25**}
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**THORACIC SURGERY SERVICE
AND LUNG TRANSPLANTATION**

Vall d'Hebron University Hospital

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**Vall d'Hebron
University Hospital**

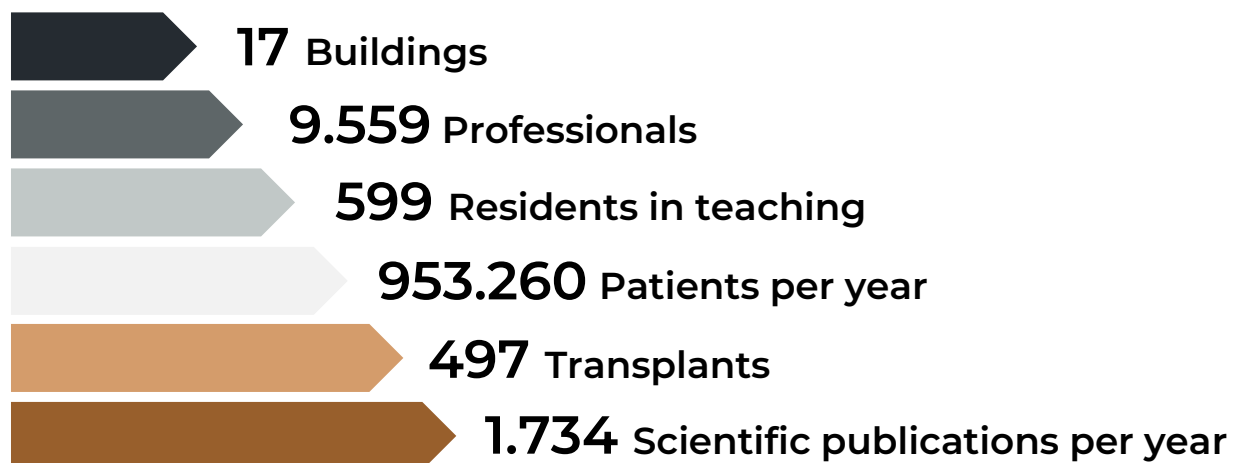


The Vall d'Hebron University Hospital is a health, teaching and research complex, at the service of health and patients. It is the largest complex in Catalonia and one of the largest in the Spanish State. It is geographically located at the foot of the Collserola mountain range, north of the city of Barcelona and its area of influence.

Structured in three large healthcare centers: General Hospital, Children's Hospital and Women's Hospital and Traumatology, Rehabilitation and Burns Hospital, the complex also has the Pere Virgili Health Park, located in a nearby area, where the Surgery Unit is located without Income, and extends its activity to different Primary Care Centers (CAP) in the territory.

With more than 1,000 beds, the Hospital is committed to a management model that places the patient at the center of its actions and acquires a commitment to the future through teaching and innovation, while promoting participation in Catalan, state and international projects of research. Quality is, therefore, a benchmark for the Hospital's professionals, which is why it has acquired recognized national and international prestige and participates in the initiatives of the Department of Health and the public company Institut Català de la Salut, to which it belongs.

1.1 THE HOSPITAL IN FIGURES



1.2 REFERENCE CENTER IN TERCIARISM AND HIGH COMPLEXITY

We are a reference center of the National Health System (Spanish territory) for highly complex procedures in both adults and children and tertiary references for most of the highly complex medical and surgical processes and procedures in both Catalonia and Spain or at international level. This is possible thanks to the knowledge of our professionals that covers all health-related disciplines, and in the use of pioneering technologies.



1.2.1 Certifications and accreditations

We are the State hospital with the most European reference networks (known as ERN, for its acronym in English). We participate as a highly specialized health center in 10 minority disease networks, which allows us to share resources and knowledge with other top-level European hospitals

CSUR - Centers, Services and Reference Units of the National Health System

Adult and child

- Hereditary angioedema
- Hereditary ataxias and paraplegias
- Familial heart disease
- Congenital coagulopathy
- Exstrophy-epispadias complex (bladder exstrophy, epispadias and cloacal exstrophy)
- Multiple sclerosis
- Systemic autoimmune diseases
- Complex glomerular diseases
- Congenital metabolic diseases
- Rare neuromuscular diseases
- Rare diseases with movement disorders
- Imported tropical diseases
- Hereditary erythropathology
- Primary immunodeficiencies
- Mastocytosis
- Complex hypothalamic-pituitary pathology
- Critical burns
- Complex ocular surface reconstruction. Keratoprosthesis
- Reconstruction of the auricle
- Congenital bone marrow failure syndromes
- Pediatric and adult lung transplantation

Adult

- Congenital heart disease
- Autoinflammatory diseases
- Pelvic osteotomy in hip dysplasia
- Sarcomas and other musculoskeletal tumors
- Treatment of resistant osteoarticular infections
- Orbital tumors in adults

Children

- Complex heart disease in pediatric patients
- Severe pediatric kidney disease and dialysis treatment
- Complex pediatric pulmonary hypertension
- Neuroblastoma
- Complex pediatric neurosurgery
- Pediatric orthopedics
- Sarcomas in childhood
- Pediatric heart transplantation
- Pediatric liver transplantation
- Pediatric allogeneic hematopoietic stem cell transplantation
- Pediatric kidney transplantation

ERN - EUROPEAN REFERENCE NETWORKS

Adult and child

- Craniofacial anomalies and ear, nose and throat disorders (CRANIO)
- Rare Adult Cancers - Solid Tumors (EURACAN)
- Heart Diseases (GUARD-HEART)
- Hematologic Diseases (EuroBloodNet)
- Liver Diseases (RARE-LIVER)
- Neuromuscular Diseases (EURO-NMD)
- Rare Bone Diseases (BOND)
- Rare Urogenital Diseases and Complex Conditions (eUROGEN)
- Rare Multisystem Vascular Diseases (VASCERN)
- Rare Congenital Malformations and Intellectual Disabilities (ITHACA)
- Endocrine Pathology (ENDO-ERN)
- Renal Pathology (ERKNet)
- Respiratory Pathology (ERN LUNG)
- Neurological Pathologies (ERN RND)
- Connective Tissue and Musculoskeletal Diseases (ERN ReCONNET)

Pediatric

- Cancer Pediatric - oncohematology (PaedCan)
- Hereditary metabolic disorders (MetabERN)
- Immunodeficiencies, autoinflammatory and autoimmune diseases (RITA)
- Hereditary and congenital diseases (ERNICA)
- Urogenital diseases and conditions (eUROGEN)
- Pediatric transplantation (TRANSPLANT-CHILD)

UNE-EN-1450 9001:2015

- Clinical Laboratories
- Hospital pharmacy
- Physics and Radiological Protection
- Radiation Oncology
- Diagnostic Imaging Institute

XUECS CATSALUT UNIDADES DE EXPERTEZ CLÍNICA EN ENFERMEDADES MINORITARIAS

Adult and child

- Epileptic diseases
- Immune diseases: area of primary immunodeficiencies
- Immune diseases: area of autoinflammatory diseases
- Immune diseases: area of systemic autoimmune diseases
- Hereditary metabolic diseases
- Rare endocrine diseases
- Rare non-oncological hematological diseases
- Rare neuromuscular diseases
- Rare renal diseases
- Respiratory diseases
- Hemophilia and congenital coagulopathies
- Genetically based cognitive behavioral diseases in paediatrics

BPSO BEST PRACTICE SOPTLIGHT ORGANIZATION

- Implementation and Evaluation of Good Practice Guides of the Registered Nurses Association d'Ontario



1.3 TEACHING

We understand teaching as a strategic axis of the health system, which must be aimed at improving care and its quality. We contribute to training professionals committed to society, welcoming to patients, governed by ethical and deontological principles, active in research, innovators and experts. Our commitment to specialized health training is supported by a long and consolidated teaching career, which began in 1968, when we were among the first to launch the MIR system. We are currently one of the largest training hospitals in the State, with **167 accredited places in 50 specialties**, which can be accessed by graduates in medicine, pharmacy, psychology, biology, chemistry, physics, and graduates and graduates in nursing.

Currently, the training of specialists is carried out in the following hospital specialties:

Allergology

Anesthesiology and resuscitation

Angiology and vascular surgery

Cardiology

Cardiovascular surgery

Clinical biochemistry

Clinical neurophysiology

Clinical pharmacology

Clinical psychology

Dermatology MQ and venereology

Digestive system

Endocrinology and nutrition

General and digestive system surgery

Geriatrics

Hematology and haemotherapy

Hospital pharmacy

Hospital radiophysics

Immunology

Intensive care medicine

Internal medicine

Medical oncology

Mental health nursing

Microbiology and parasitology

Nephrology

Neurology

Neurosurgery

Nuclear medicine

Obstetric-gynecological nursing

Obstetrics and gynecology

Occupational medicine

Occupational nursing

Ophthalmology

Oral and maxillofacial surgery

Orthopedic surgery and traumatology

Otorhinolaryngology

Pathological anatomy

Pediatric nursing

Pediatric surgery

Pediatrics and specific areas

Physical medicine and rehabilitation

Plastic, aesthetic and reconstructive surgery

Preventive medicine and public health

Psychiatry

Pulmonology

Radiation oncology

Radiodiagnosis

Radiopharmacy

Rheumatology

Thoracic surgery

Urology



El Hospital Universitari Vall d'Hebron es y quiere ser un **hospital formador**.

1.4 RESEARCH

The Vall d'Hebron University Hospital, through the Vall d'Hebron Institute of Research (VHIR) promotes and develops biosanitary research and innovation , aimed at finding solutions to the health problems of citizens and with the desire to contribute to the scientific, educational, social and economic development of its area of competence.

The Research Institute currently leads:

71 Research groups	15,288 Impact factor
2.179 Professionals	975 Active clinical trials
1.629 Scientific publications per year	35 Families of licensed patents

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**Advanced
Training course**



2.1 PRESENTATION

This advanced training course in Lung Transplantation aims to expand and advance in a structured manner the knowledge and skills in lung transplantation, covering both medical-surgical aspects and the area of research. Additionally, it places special emphasis on understanding lung transplantation in both adults and pediatrics.

This course is in line with the standards and training in lung transplantation of the International Society for Heart and Lung Transplantation (ISHLT).

2.2 JUSTIFICATION

Lung transplantation represents a highly complex surgery where excellence in the comprehensive evaluation of pulmonary diseases, combined with an optimal perioperative management strategy, is crucial for achieving positive outcomes in patients. This procedure is the most effective treatment for those with terminal lung disease, although the availability of organs for transplantation is limited and depends on an efficiently organized healthcare system for the detection and procurement of these organs.

Our hospital has a qualified team for the procurement of lung grafts from deceased donors, both in cases of brain death and controlled circulatory death. Additionally, we apply advanced techniques for the preservation and transport of organs, utilizing ex vivo perfusion devices that allow for the evaluation and optimization of grafts before transplantation.

The advanced training course we offer is designed to provide healthcare professionals with the necessary training to address the challenges of lung transplantation. Through this program, participants will acquire the essential skills and knowledge to ensure quality care, thereby improving clinical outcomes for patients requiring these complex interventions.

2.3 COURSE PROGRAM

2.3.1 Topics

Pulmonary Surgery

- Surgical treatment of pulmonary diseases



- Evaluation and management of patients with advanced pulmonary diseases (idiopathic pulmonary fibrosis, pulmonary hypertension, severe COPD, cystic fibrosis, among others).
- Advanced techniques in minimally invasive thoracic surgery.
- Robotic surgery in lung transplantation.
- Perioperative management and treatment of surgical complications in lung transplantation.
- Ex vivo lung perfusion techniques for graft evaluation.

Lung Transplantation

- Donor acceptance criteria for lung transplantation (brain-dead donors and circulatory death donors).



- Prioritization systems on the lung transplant waiting list (allocation criteria).
- Inclusion and exclusion criteria on the adult and pediatric lung transplant waiting list.
- Multi-organ extraction techniques in circulatory death and brain death donors.
- Surgical technique for adult and pediatric lung transplantation.
- Immunosuppression in adult and pediatric recipients, considering immunological and non-immunological risk factors.
- Monitoring of complications in the immediate postoperative period.

- Medium to long-term follow-up of lung transplant recipients.
- Post-transplant complications.
- Cancer and lung transplantation.

Advanced Techniques and New Technologies

- Implementation of new technologies in lung transplantation.
- Advances in organ preservation and transport.
- Minimally invasive lung transplantation.
- Development and application of ex vivo perfusion techniques.

This comprehensive program provides advanced and detailed training in lung transplantation, covering from donor evaluation and selection to the long-term management of transplanted patients, thus ensuring complete and specialized training in this critical area of medicine.

2.3.2 Course objectives

General Objectives

- Acquire solid training in the knowledge and management of pulmonary surgical pathology.
- Acquire solid training in the knowledge of lung transplantation.

Specific Objectives

- Acquire the abilities to design transplantation strategies for patients with terminal lung diseases.
- Acquire advanced knowledge in organ donation.
- Acquire advanced knowledge in lung transplantation surgical techniques.

- Acquire basic knowledge in pediatric lung transplantation.
- Understand the Spanish transplant model and its applicability in other contexts.

2.3.3 Skills to be Achieved

Specific skills:

- Evaluate patients for lung transplantation in a multidisciplinary committee.
- Determine the timing and type of surgical intervention for lung transplantation.
- Evaluate surgical risk in transplant candidates.
- Indicate alternatives to lung transplantation when necessary.
- Evaluate and treat surgical complications of lung transplantation.
- Perform follow-up of post-transplant patients.
- Evaluate patients with rejection or post-transplant complications.
- Manage patients with advanced pulmonary diseases requiring transplantation.
- Evaluate donors for lung transplantation.
- Select the appropriate immunosuppressive treatment for each patient.
- Manage the follow-up of lung transplant patients, including the diagnosis and treatment of early and late complications.
- Design databases and perform statistical analysis related to lung transplantation.

Transversal skills:

- Work in a multidisciplinary team for the evaluation and management of patients.
- Design treatment strategies for patients with terminal pulmonary diseases.
- Develop a clinical practice based on bioethical principles.
- Center clinical practice on the patient, with a focus on teaching and research.

2.3.4 Teaching Methodology

The teaching methodology is based on daily participation in the clinical and surgical activities of the Service, as well as involvement in training activities that coincide with the trainee's period.

The trainee will divide the training period equally between the Lung Transplant Unit and the Thoracic Surgery Unit, and will also actively participate in the management of pre- and post-transplant patients during the training period. The structure of the Advanced Training in Lung Transplantation will be organized into 12-month course.

Monday	8:00 h	Patient rounds in the Thoracic Surgery and Lung Transplant Unit.
	9:00 h	General Thoracic surgery outpatient clinic (Module B, ground floor, room 24)
	10:30 h	Patient rounds in the ICU post-lung transplant.
	14:30 h	Multidisciplinary thoracic tumor committee.
	Morning: Scheduled surgical activity with robotic surgery, which the trainee can attend.	

Tuesday	8:15 h	Lung Transplant Committee.
	9:15 h	Lung Transplant outpatient clinic (Module B, First Floor, Dr. Deu)
	10:30 h	Patient rounds in the ICU post-lung transplant



Wednesday	8:00 h	Patient rounds in the Thoracic Surgery and Lung Transplant Unit (8th floor)
	9:00 h	Scheduled surgery.
		General Thoracic surgery outpatient clinic (Module B, ground floor, room 24)
10:30 h	Patient rounds in the ICU post-lung transplant.	

Thursday	8:00 h	Scheduled surgery.
	9:00 h	General Thoracic surgery outpatient clinic (Module B, ground floor, room 24)
	10:30 h	Patient rounds in the ICU post-lung transplant.
	14:30 h	Multidisciplinary thoracic tumor committee.

Friday	8:00 h	Patient rounds in the Thoracic Surgery and Lung Transplant Unit (8th floor).
	9:00 h	Scheduled surgery.
		General Thoracic surgery outpatient clinic (Module B, ground floor, room 24)
10:30 h	Patient rounds in the ICU post-lung transplant.	

Throughout the training period, the trainee will participate in the surgical act of adult and pediatric lung transplants (donor and/or recipient).

Clinical Sessions of the Service	
	Participation in all sessions is required:
	<ul style="list-style-type: none">• Daily Clinical Session: Thoracic Surgery and Lung Transplant Service.• Weekly Lung Transplant Committee Session: (Tuesdays at 8:15 a.m., 11th floor).• Biweekly Thoracic Tumor Committee Session: (Mondays and Thursdays at 2:30 p.m., ground floor).• Monthly Morbidity-Mortality Session: Thoracic Surgery and Lung Transplant Service (one Thursday per month at 8:15 a.m., 6th floor).• Research Session: (once a month). Discussion and proposal of a research project to be conducted under supervision during the training period.

2.3.5 Evaluation

Continuous Evaluation

- Ongoing evaluation of knowledge and attitudes in clinical practice.
- Written tests for those training activities that require it during the course.
- Presentation of 3 clinical sessions reviewing "novel" topics in lung transplantation.

Final Evaluation

- Presentation and evaluation of a research project.

2.4 MANAGEMENT AND TEACHING STAFF

Program Directors:

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Specialist Physician

Thoracic Surgery and Lung Transplant Service

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Albert Jauregui Abularach

Head of Service

Thoracic Surgery and Lung Transplant Service

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Teaching Collaborators:

Thoracic Surgery and Lung Transplant Service

María Deu Martín

Section Chief

Laura Romero Vielva

Section Chief

Joel Rosado Rodríguez

Specialist Physician

Javier Pérez Vélez

Specialist Physician

Leire Sánchez Corujo

Specialist Physician

Sara Monge Blanco

Specialist Physician

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Procedures and Conditions

3.1 GENERAL COURSE DATA

	Program name	Advanced Training Course in Lung Transplantation
	Program type	Advanced Training
	Modality	In-person
	Teaching Center	Hospital Universitari Vall d'Hebron
	Languages	Spanish, Catalan or English
	Places available	1
	Who is it addressed to?	Physicians specializing in Thoracic Surgery
	Duration	12 months (October 1, 2025 – September 30, 2026)
	End of registration period	March 31, 2025
	Schedule	Coinciding with service working hours
	Dedication	Full time (non-exclusive)
	Prize	3.000 euros

3.2 REGISTRATION PROCEDURES

Documentation to be provided to take part in the selection process:

- [Registration form for Advanced Training](#).
- Photocopy of DNI/NIE/Passport.
- Photocopy of the visa in case the country of origin requires it.
- Concise and updated Curriculum Vitae (maximum three pages).
- Copy of the Medicine degree.
- Copy of the specialist title.
- Written explaining the reasons for your interest in the program you are opting for. Please include the documentation you consider of interest.

Documentation to provide once the place is confirmed:

- Certificate of negative sexual offences in force.
- Professional membership card (only for Spanish professionals).
- [Vaccination medical report from the U. Vall d'Hebron Hospital](#) (only for foreign professionals).
- Photocopy of the visa in case the country of origin requires it (only for foreign professionals).
- Photocopy of the accident and health care insurance (only for foreign professionals).



- Photocopy of the civil liability insurance (only for foreign professionals).
- If applicable, letters of recommendation from relevant people from your workplace or others, as well as from the Director of the Training Programme at the centre where you were trained.

Photocopies of both insurance policies must clearly identify the name of the insurance company and the policy number. These documents are essential so that the training period can begin. All documentation to be provided to apply for admission to the program must be sent by email to: aulavh@vallhebron.cat.

Apart from this documentation, if the course management deems it necessary, the interested party may be asked for a personal interview.

The documentation to be provided once the place has been confirmed must be sent at least one month before the start date, otherwise the registration will be cancelled.

3.3 PROGRAM APPROVAL

Once the candidate selection process is completed, the Aula Vall d'Hebron will send the resolution of acceptance to the Advanced Training by email to the chosen candidate.

Once the place is confirmed by the interested party, the registration amount to be determined based on the dates and duration of the program will be processed by bank transfer.

3.4 REQUIREMENTS FOR STAYING AT THE CENTER

3.4.1 Relationship of professionals with the Vall d'Hebron University Hospital

The professional admitted to the program will access the Hospital premises for the exclusive purpose of training and recycling. The admitted professional has an "observer" role, so they will not be responsible for the care of inpatients, outpatients or emergency patients, nor sign clinical documentation.

Acceptance into the course will not imply any type of employment relationship with the Hospital. No type of financial compensation or remuneration will be received from the Hospital during the duration of your training.

In addition, the professional must have an accident policy and insurance that covers medical care. The Hospital is exempt from any type of claim, regarding common illness or accident that could occur as a result of your stay in the center's facilities, because your connection with the center is exclusively for training.

You will be subject to the internal rules and regulations of the Hospital, as well as the specific rules of the service or unit where you carry out the training.

You must demonstrate a commitment to the mission, vision and values of the center common to the service and be willing to integrate with the team.

He will show a clear interest and respect for the specialty and the center.

3.4.2 Activities

The professional will have the training schedule established with the training director based on the program. You will be obliged to know and respect Spanish legislation regarding the protection of personal data (Law 15/1999 of December 13) and guarantee professional secrecy both during your stay at the Hospital and afterwards.

You must have a civil liability policy that covers the risks that you may incur as a result of the activities carried out during your training period.

3.5 ADMISSION PROCESS AT THE CENTER

On the day of incorporation, the interested party must go to the Teaching Directorate to complete the admission process to the center.

Aula Vall d'Hebron

Dirección de Docencia
Pl. 5ª Hospital de Traumatología
Paseo Vall d'Hebron 119-129
08035 Barcelona (Spain)

Likewise, the interested party must sign a permanence commitment specifying that they know, understand and accept the conditions established by the Hospital, and a data confidentiality commitment.

3.6 CANCELLATION OF THE TRAINING PROGRAM

In the case of non-compliance with the established requirements, the Hospital reserves the right to revoke the training permit at any time without the right to claim.

On the other hand, in the event that the interested party submits the cancellation of the training program before its start, and always for reasons of force majeure, part of the registration fee that has been contributed to confirm the place will be refunded. Likewise, the program management may propose to the interested party the possibility of postponing the start of training to the following year.

3.7 CERTIFICATION

At the end of the training period, the Teaching Directorate will issue a certificate of attendance in view of the report provided by the program directors.

