

DESCRIPTION OF THE MODULES

Organ Procurement

This training program covers the main aspects of the donation process:

- Donor detection and identification

Enable participants to learn the essential steps and most effective ways to identify potential or eligible organ donors and to enhance their referral to the Donor

- Brain death diagnosis

Establish an understanding of the Brain Death definition and the requirements to accurately perform the clinical diagnosis and confirmatory testing.

- Donor management

Provide the opportunity to build skills and confidence in the BD donor's management, according to the most frequent pathophysiological changes occurred due to BD and targeted in the outcome graft survival and recipients best outcome.

- Family approach

Enable participants to build communication skills and confidence in breaking bad news and approaching potential donor families to obtain consent for organ donation.

- Organ retrieval and preservation and allocation criteria

Identify the different surgical techniques, the principles of organ preservation, solutions and techniques regularly used.

Identify the different criteria and systems that allow donated organs to be allocated equitably among transplant patients, seeking to achieve the best use of them.

- Donation after Circulatory Death (DCD)

Describes the categories and criteria, states the concept of warm ischemia, defines perfusion techniques, assess the viability of organs and includes the ethical and legal aspects.

Leadership, Quality, Management & Innovation in Donation and Transplantation

The course aim is to expand the knowledge and understanding of donation practices, explore the impact of varying ethical frameworks, unique cultural needs, funding models and organizational structures and learn how to inspire health professionals, community and nations in the donation concerns.

The course is designed to provide aspiring leaders, from developed and developing transplant and donation communities, the experience of learning from their peers and mentors, from similar and vastly dissimilar environments, how to serve their communities, recipients and donor families and fulfil the promises of donation and transplantation.

It will also allow confronting the challenges of donation of organs, tissues and cell for transplantation by providing advanced leaders in donation, with examples of best practices in the science and business. The application of “business management” models and, in some cases, for-profit processing and supply to hospitals has created an element of commercialism that can sit awkwardly with the donor or the donor family’s motivation.

Contents:

- Organ procurement and transplant programs organization: Best practice models
- Management & leadership
- Teambuilding & empowerment
- Optimal cost-effective measures
- Engaging your staff: working with and through others
- Quality programs, quality indicators, standards and auditing in organ donation and transplantation
- Incorporating skills into practice

Organ Transplantation

This training program aims at providing the knowledge and competences needed for the successful clinical evaluation of the potential recipients of solid organs, as well as the waiting list criteria, and pre and post-transplant treatment.

The main goals of the module are:

- To improve participants’ knowledge on acute and chronic kidney, liver, pancreas, heart and lung failure and adequately assess referred patients for transplantation.
- To provide participants with the knowledge of the principles of pre-op preparation (bench preparation), preparation of implant site (anatomic references including variations and anomalies), as well as common intra-operative challenges and variations.
- To identify and treat post-op complications: drug side-effects, infection, rejection, complications, recurrent disease.
- To provide knowledge on the surgical procedures (organ specific) and post-operative care of living donors.
- To improve short and long-term follow-up of the living donor with attention to physical and psycho-social well-being and to facilitate knowledge on living donor registries.

The topics of the course are:

- General aspects
 - Immunology basics and Immunosuppression
 - Infections and malignancies
 - Anesthesiology
- Organ specific: Kidney, Liver, Pancreas, Heart, Lung
 - Indications and Waiting List
 - Organ evaluation and surgical procedure (techniques and surgical complications)
 - Postoperative management and medical follow up (early/late & histopathology/radiology)
- Living donation
 - General aspects of living donation
 - Kidney and liver living donation
 - Living donor registries

Tissue Banking and Advanced Therapies

The banking of human tissues and cells has many facets and involves professionals with a wide range of skills and knowledge. They include experts with training in medical, technical, scientific, psychological, and communications fields. This course focuses on the many aspects of donation in cell and tissue banking in different economic, legal and social contexts. The issues raised are relevant on a global stage. The donations from deceased and living donors may include bone marrow, cord blood, skin, cardiovascular, ocular and musculoskeletal tissue, and amniotic membrane.

The professional requirements for the safety and quality of tissues and cells for transplantation have increased steadily over time and are reflected in the development of stringent regulations.

The course provides an educational framework that will allow practitioners to establish optimal policies and practices for tissue and cell donation.

Contents:

- Tissue donor detection and selection criteria
- Ethical and regulatory issues in tissue banking
- Quality management in tissue banking
- Sterilization of tissue grafts
- Eye banking
- Cardiovascular banking
- Musculoskeletal banking

- Skin banking
- Advanced therapies
- Stem cells and cord blood banking
- Gamete banking
- Tissue living donation
- Tissue and eye banking today
- Legal, ethical and regulatory aspects
- Quality management
- Traceability and biovigilance
- Detection, identification and suitability of tissue and eye donors
- Tissue and eye recovery and processing
- Facilities organization and design
- Clinical graft applications
 - Ocular and amniotic
 - Membrane
 - Skin
 - Cardiovascular
 - Musculoskeletal
- Hematopoietic stem cells