



Postgraduate Diploma

Update on Major Spinal Cord Disorders and Hematologic Neoplasms

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 20 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-update-major-spinal-cord-disorders-hematologic-neoplasms

Index

 $\begin{array}{c|c} 01 & 02 \\ \hline & & \\ \hline &$

06

Certificate

p. 32

01 Introduction

Today, the specialty of hematology is a pioneer in innovation in the areas of diagnosis and treatment. In addition, it should be noted that hematologists are leaders in the clinical application of immunotherapy in the fight against the different hematological cancers, as well as in the main bone marrow disorders.



tech 06 | Introduction

Scientific medical advances in the last 10 years have made it easier to change the notion that hematology is confined to mere hematometry, so this teaching program aims to focus the professional development of specialists in the many areas of the specialty (hematologic oncology, genetics, immunotherapy, cardiovascular risks, blood transfusions, bone marrow transplants, anticoagulants, anemias, artificial blood) so that excellent care is provided to hematology patients based on access to the most recent and innovative medical advances.

Different scientific societies around the world that deal with this specialty strive to rapidly incorporate the results of biomedical research into clinical practice, especially the treatment of hematological malignancies (blood cancers), but also iron deficiency and anemias, the administration of direct-acting oral anticoagulants-DOACs, bone marrow transplants and, in the long-term, research focused on obtaining artificial blood, with the ultimate aim of ensuring that healthcare managers include these techniques in the services provided by national healthcare systems as soon as possible.

The reasons why hematology and hemotherapy is one of the fastest progressing medical disciplines in terms of knowledge and technology in recent decades lie in the integration of biological and clinical knowledge, which has led to a better understanding of the mechanisms of disease, thereby facilitating the development of more appropriate guidelines for clinical action. All of this has contributed to hematology and hemotherapy reaching a remarkable degree of maturity and justifying its future as an integrated specialty, this being the ideal framework for training and improving specialists in this area of medical knowledge.

This Postgraduate Diploma in Update on Major Spinal Cord Disorders and Hematologic Neoplasms endorses the latest advances in research and the highest scientific evidence, with a robust and didactic format program that positions it as a teaching product of the highest scientific rigor at international level, aimed at health professionals who in their daily clinical practice face a the care of patients or populations with hemorrhagic diseases. In addition, the program is based on a multidisciplinary approach to its subjects, which allows training and professional development in different areas.

This Postgraduate Diploma, completely online, offers a wide variety of audiovisual resources designed with the latest technology. These include masterclasses given by a world recognized expert in the field of hematology, analyzing the practical reality of the most advanced international centers. The professional will also find exercises based on real cases and simulations, providing a more immersive learning experience. It is important to note that the development of the program does not require travel to on-site centers, since the professional will only need a device with an Internet connection to access the content and make progress in the program.

This Postgraduate Diploma in Update on Major Spinal Cord Disorders and Hematologic Neoplasms contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Clinical symptoms cases presented by experts in hematology.
- The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional.
- Diagnostictherapeutic developments on assessment, diagnosis, and treatment in hematology patients..
- Practical exercises where the self-assessment process can be carried out to improve learning.
- The Iconography of clinical and diagnostic imaging tests.
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course..
- With special emphasis on evidence-based medicine and research methodologies in hematology.
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- Content that is accessible from any, fixed or portable device with an Internet connection..



With the Postgraduate Diploma in Update on Major Spinal Cord Disorders and Hematologic Neoplasms you have the opportunity to update your knowledge in a comfortable way"

Introduction | 07 tech



This training may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Update on Major Spinal Disorders and Hematologic Neoplasms, you will obtain a master's degree from TECH - Technological University"

The teaching body is made up of respected and renowned professionals with extensive experience in healthcare, teaching, and research, who have work in many countries where these diseases are prevalent.

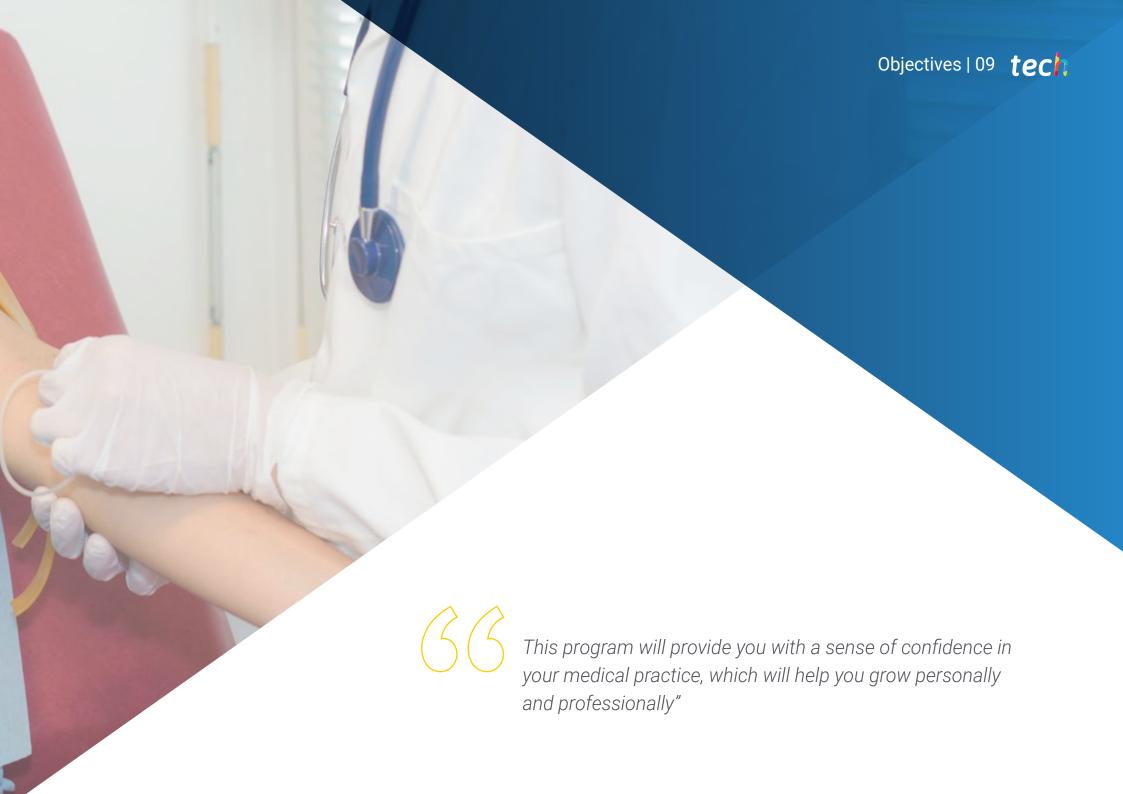
The methodological design of this Postgraduate Diploma, developed by a multidisciplinary team of e-learning experts, integrates the latest advances in educational technology for the creation of numerous multimedia educational tools allow the professional, based primarily on the problem-based learning method, to address real problems in their daily clinical practice, which will allow them to advance by acquiring knowledge and developing skills that will impact their future professional work.

It should be noted in this Postgraduate Diploma that each of the contents generated, as well as the videos, self-evaluations, clinical cases and exams, have been thoroughly reviewed, updated, and integrated by the team of experts that make up the faculty, to ensure that the learning process is orderly and instructive in order to achieve the program's objectives.

This Postgraduate Diploma offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

It includes clinical cases to bring the program's degree as close as possible to the reality of care in medicine.





tech 10 | Objectives



General Objectives

Update the specialist's knowledge through the latest scientific evidence in the
diagnosis and treatment of hematological diseases, in order to develop measures
to prevent, diagnose, treat, and rehabilitate hematological diseases, with a
multidisciplinary and integrative approach that supports medical care with the
highest quality standards for managing and monitoring hematology patients...



Don't miss the opportunity and get up to date on advances in the main spinal cord disorders and hematological malignancies to incorporate them into your daily medical practice"







Specific Objectives

- Provide students with advanced, in-depth, up-to-date, and multidisciplinary information that allows them to comprehensively approach the hematological health/disease process, ensuring proper treatment and the use of all appropriate therapeutic procedures.
- Provide training and practical/theoretical improvement that will ensure a reliable clinical diagnosis supported by the efficient use of diagnostic methods.
- Emphasize the role of the rational use of diagnostic technologies when studying these patients.
- Get up-to-date on the epidemiology, etiopathogenesis, diagnosis, and treatment of the various hematological malignancies: myelodysplastic syndromes, acute myeloid and lymphoid leukemias, chronic myeloproliferative syndromes, Hodgkin and non-Hodgkin lymphomas, plasma cell dyscrasia.
- Discuss the importance of a comprehensive and integrated care approach among all specialties involved in caring for these patients.
- An in-depth look at the most innovative and developing alternatives offered when caring for these patients.







International Guest Director

Dr. Joseph Hai Oved is a pediatric hemato-oncology specialist at Memorial Sloane Kettering Cancer Center, considered one of the best cancer centers in the world. His work focuses on stem cell and bone marrow transplantation, as well as cell therapies, to treat non-cancerous diseases. His work in the field of transplantation to patients with difficult-to-treat immune dysfunctions or inherited immune deficiencies, as well as those with bone marrow failure syndromes, is particularly noteworthy.

His research is prolific in the hemato-oncology area, seeking new ways to personalize transplantation to achieve a precise cure with minimal side effects. He has studied in depth the effects of the different techniques used to manipulate donated stem cells, extracting or adding specific cells of interest. He has also analyzed how exposure to different conditioning agents (chemotherapies or other drugs used to prepare the body for transplantation) affect outcomes. His work has advanced the identification of biomarkers to more accurately predict transplant outcomes.

Joseph is a member of several national and international groups in bone marrow transplantation, hematology and immunology. He serves on committees of many of these organizations, where they discuss potential future therapies, clinical trials and efforts to further advance the field of pediatric transplantation and cellular therapies worldwide.

All his scientific contribution places him as a reference in his field, receiving several awards. These include two fellowships awarded by the Howard Hughes Medical Institute, one of the largest privately funded organizations for biological and medical research in the United States. He also received a fellowship in immunology from the Weizmann Institute of Science, considered one of the most advanced multidisciplinary research institutions in the world.



Dr. Hai Oved, Joseph

- · Pediatrician specialized in hemato-oncology at the MSK Cancer Center New York
- · Member of the Scientific Advisory Board of Emendo Biotherapeutics.
- · Managing Partner of New World Health, LLC
- · Observer on the board of BioTrace Medical Inc.
- · Pediatrician specializing in hemato-oncology at Children's Hospital of Philadelphia
- M.D. from NYU School of Medicine
- · Fellowship in pediatric hemato-oncology at Children's Hospital of Philadelphia
- · Residency in Pediatrics at New York Presbyterian Weill Cornell Medical College



Guest Director



Dr. Martínez López, Joaquín

- · Jefe de Servicio de Hematología del Hospital 12 de Octubre
- Presidente de AltumSequencing
- · Director del grupo de investigación traslacional y la unidad de ensayos clínicos tempranos en hematología del Hospital 12 de Octubre
- Director de la Fundación CRIS contra el cáncer
- · Doctor en Medicina por la Universidad Complutense de Madrid
- · Licenciado en Medicina por la Universidad de Granada
- · Estancia Práctica en Terapia Celular la Universidad de Toronto

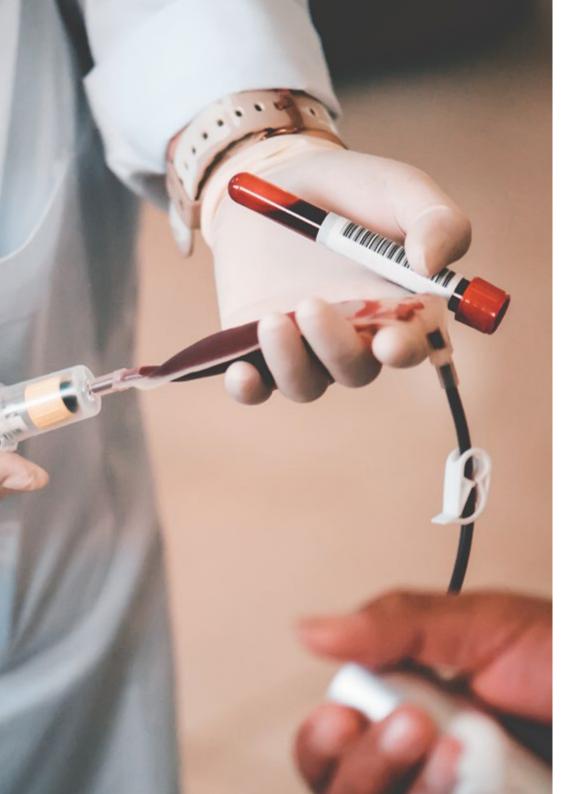
Professors

Dr. Carreño Gómez-Tarragona, Gonzalo

- Servicio de Hematología y Hemoterapia del Hospital Universitario 12 de Octubre
- Investigador especializdo en etiopatogenia molecular de las neoplasias hematológicas
- Licenciado en Medicina por la Universidad Autónoma de Madrid
- Máster Propio en Trasplante Hematopoyético por la Universidad de Valencia
- Miembro del Comité Ético de Investigación Clínica del Hospital Universitario 12 de Octubre

Dr. Sánchez Pina, José María

- Especialista en Hospitalización y Trasplante Hematopoyético en el Hospital Universitario 12 de Octubre
- Integrante del grupo de Terapia Celular del Hospital 12 de Octubre
- * Licenciado en Medicina por la Universidad de Alcalá
- Especialidad en Hematología y Hemoterapia en el Hospital Universitario 12 de Octubre
- * Máster propio en Trasplante Hematopoyético 4ª edición por la Universidad de Valencia



Course Management | 17 tech

Dr. Rodríguez Rodríguez, Mario

- Facultativo especialista en Trombofilia y Hemostasia en el Hospital Universitario 12 de Octubre
- Facultativo especialista de área en consulta de trombofilia y hemostasia y en laboratorio de coagulación básica y especial en el Hospital Universitario 12 de Octubre
- Participación en labores de calidad para acreditación ENAC del laboratorio de coagulación del Hospital Universitario 12 de Octubre
- * Graduado en Medicina y Cirugía por la Universidad Complutense de Madrid
- Especialidad en Hematología y Hemoterapia en el Hospital Universitario 12 de Octubre



"Make the most of this opportunity to learn about the latest advances in this subject to apply it to your daily practice"

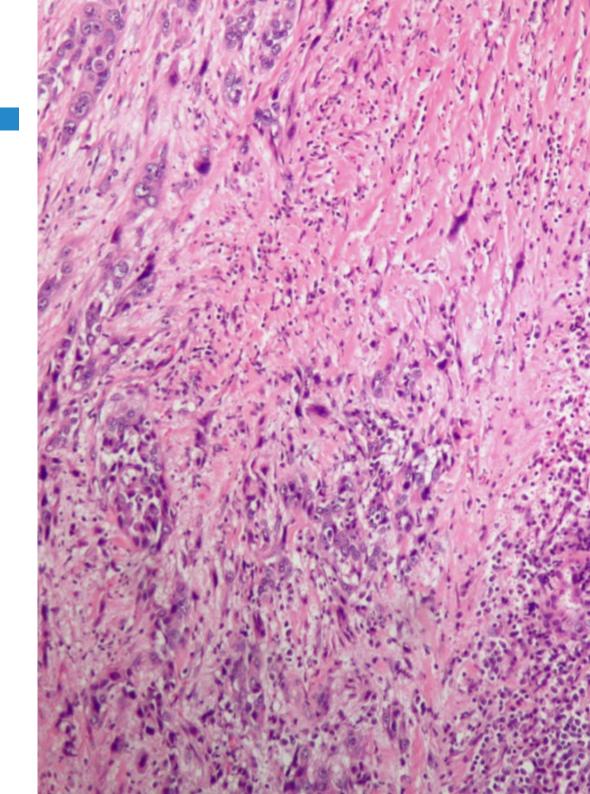


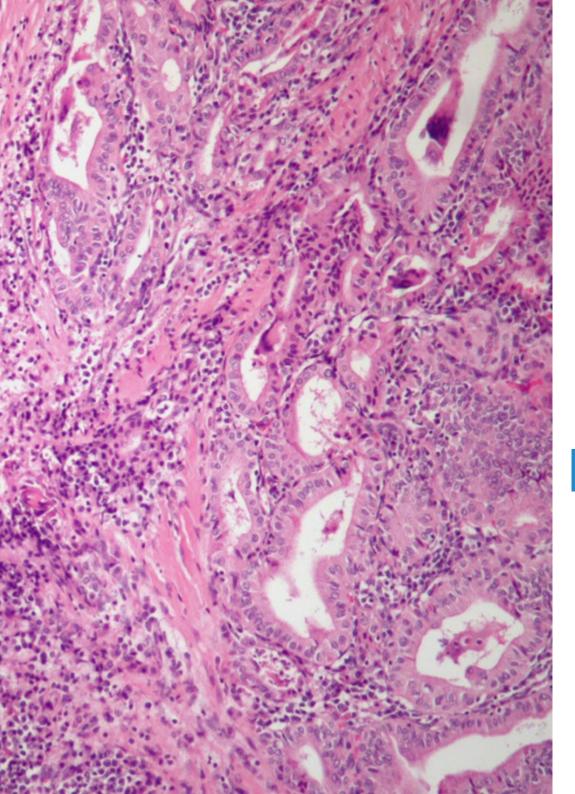


tech 20 | Structure and Content

Module 1. Scientific Developments in Spinal Cord Disorders

- 1.1. Medullary Aplasia
 - 1.1.1. Definition
 - 1.1.2. Epidemiology and Etiology
 - 1.1.3. Clinical Manifestations
 - 1.1.4. Clinical and Staged Diagnosis according to Diagnostic Tests
 - 1.1.5. Latest Treatment Recommendations
- 1.2. Myelodysplastic Syndromes: Latest Classifications
 - 1.2.1. Definition
 - 1.2.2. Epidemiology
 - 1.2.3. Clinical Manifestations
 - 1.2.4. Diagnosis and Current Classifications
 - 1.2.5. Current Review of the Treatment and Use of Hypomethylating Therapy
- 1.3. Updated Approach to Agranulocytosis:
 - 1.3.1. Definition
 - 1.3.2. Epidemiology and Etiology
 - 1.3.3. Clinical Manifestations
 - 1.3.4. Diagnostic Complexities
 - 1.3.5. New Developments in Treatment
- 1.4. Polycythemia Vera
 - 1.4.1. Definition
 - 1.4.2. Epidemiology
 - 1.4.3. Clinical Manifestations
 - 1.4.4. Diagnosis
 - 1.4.5. Current Treatment Alternatives
- 1.5. Essential Thrombocythemia
 - 1.5.1. Definition
 - 1.5.2. Epidemiology
 - 1.5.3. Clinical Manifestations
 - 1.5.4. Diagnosis
 - 1.5.5. Treatment Review





Structure and Content | 21 tech

- 1.6. Chronic Idiopathic Myelofibrosis:
 - 1.6.1. Definition
 - 1.6.2. Epidemiology
 - 1.6.3. Clinical Manifestations
 - 1.6.4. Diagnosis
 - 1.6.5. Therapeutic Approaches
- 1.7. Hypereosinophilic Syndrome
 - 1.7.1. Definition
 - 1.7.2. Epidemiology
 - 1.7.3. Clinical Manifestations
 - 1.7.4. Diagnostic Complexities
 - 1.7.5. Treatment: Literature Review
- 1.8. Mastocytosis
 - 1.8.1. Definition
 - 1.8.2. Epidemiology
 - 1.8.3. Clinical Manifestations
 - 1.8.4. Use of Diagnostic Tests
 - 1.8.5. Alternative Treatments

Module 2. Advances in Leukemia, Lymphoma and other Oncohematologic Diseases

- 2.1. Hodgkin's Lymphoma:
 - 2.1.1. Epidemiology
 - 2.1.2. Typing and Immunophenotyping
 - 2.1.3. Clinical Manifestations
 - 2.1.4. Diagnosis and Staging
 - 2.1.5. Current Treatment
- 2.2. Non-Hodgkin's Lymphomas:
 - 2.2.1. Epidemiology
 - 2.2.2. Typing and Immunophenotyping
 - 2.2.3. Clinical Manifestations
 - 2.2.4. Diagnosis and Staging
 - 2.2.5. Current Treatment

tech 22 | Structure and Content

- 2.3. Acute Lymphocytic Leukemia:
 - 2.3.1. Epidemiology
 - 2.3.2. Immunophenotype
 - 2.3.3. Clinical Manifestations
 - 2.3.4. Diagnosis
 - 2.3.5. Current Treatment Alternatives
- 2.4. Acute Nonlymphocytic Leukemia:
 - 2.4.1. Epidemiology
 - 2.4.2. Immunophenotype
 - 2.4.3. Clinical Manifestations
 - 2.4.4. Diagnosis
 - 2.4.5. Current Treatment Alternatives
- 2.5. Chronic Myeloid Leukemia:
 - 2.5.1. Epidemiology
 - 2.5.2. Immunophenotype
 - 2.5.3. Clinical Manifestations
 - 2.5.4. Diagnosis
 - 2.5.5. Current Treatment
- 2.6. Chronic Lymphocytic Leukemia:
 - 2.6.1. Epidemiology
 - 2.6.2. Immunophenotype
 - 2.6.3. Clinical Manifestations
 - 2.6.4. Diagnosis
 - 2.6.5. Current Treatment

Module 3. Update in Plasma Cell Dyscrasias

- 3.1. Updated Approach to the Management of Multiple Myeloma:
 - 3.1.1. Definition
 - 3.1.2. Epidemiology
 - 3.1.3. Clinical Manifestations
 - 3.1.4. Diagnosis and Staging
 - 3.1.5. Review of Treatment and New Paradigms of Autologous Transplantation

- 3.2. Solitary Plasmacytoma
 - 3.2.1. Definition
 - 3.2.2. Epidemiology
 - 3.2.3. Clinical Manifestations
 - 3.2.4. Diagnosis
 - 3.2.5. Treatment Alternatives
- 3.3. Waldenström's Macroglobulinemia:
 - 3.3.1. Definition
 - 3.3.2. Epidemiology
 - 3.3.3. Clinical Manifestations
 - 3.3.4. Diagnosis
 - 3.3.5. New Treatments
- 3.4. Heavy Chain Disease:
 - 3.4.1. Definition
 - 3.4.2. Epidemiology
 - 3.4.3. Clinical Manifestations
 - 3.4.4. Diagnosis
 - 3.4.5. Treatment
- 3.5. Monoclonal Gammopathy of Uncertain Significance:
 - 3.5.1. Definition
 - 3.5.2. Epidemiology
 - 3.5.3. Clinical Manifestations
 - 3.5.4. Diagnosis
 - 3.5.5. New Treatments
- 3.6. Amyloidosis
 - 3.6.1. Definition
 - 3.6.2. Epidemiology
 - 3.6.3. Clinical Manifestations
 - 3.6.4. Diagnosis
 - 3.6.5. Current Treatments

Module 4. New Developments in the General Treatment of Hematologic Diseases

- 4.1. Antineoplastic Agents
 - 4.1.1. Groups
 - 4.1.2. Mechanisms of Action
 - 4.1.3. Pharmacodynamics
 - 4.1.4. Pharmacokinetics
 - 4.1.5. Dosage and Presentation
 - 4.1.6. Adverse Effects
- 4.2. Treatment of Infections in Hematology Patients:
 - 4.2.1. Febrile Neutropenic Patients
 - 4.2.2. Most Frequent Infections in Hematology Patients
 - 4.2.3. Most Frequently Used Antibiotic Treatments
- 4.3. Hematopoietic Progenitor Cell Transplantation:
 - 4.3.1. General Concepts
 - 4.3.2. Indications
 - 4.3.3. Results and Impact
- 4.4. Methods and Indications for Cell Therapy:
 - 4.4.1. General Concepts
 - 4.4.2. Types of Cell Therapy
 - 4.4.3. Indications
 - 4.4.4. Results and Impact
- 4.5. Principles of Gene Therapy:
 - 4.5.1. General Concepts
 - 4.5.2. Indications
 - 4.5.3. Results and Future Impact
- 4.6. Monoclonal Antibodies in Hematological Malignancies
 - 4.6.1. General Principles
 - 4.6.2. Indications
 - 4.6.3. Impact of Use

- 4.7. Innovative CAR-T Cell Treatment of Hematological Malignancies
 - 4.7.1. General Principles
 - 4.7.2. Indications
 - 4.7.3. Impact of Use
- 4.8. Palliative Care for Hematology Patients:
 - 4.8.1. General Concepts
 - 4.8.2. Treatment of the Main Symptoms in Oncohematology Patients
 - 4.8.3. Palliative Care in the End-Stage Patient and End-of-Life Care







tech 26 | Methodology

In a given situation, what would you do? Throughout these months, the professional will face multiple simulated cases which they will have to investigate, establish hypotheses and finally, resolve the situation. This method ensures specialists learn better as they accept more responsibility and get closer to the reality of their professional future.



Re-learning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success"



The clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a professional's practice.

The effectiveness of the method is justified by four fundamental achievements:

Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises that evaluate real situations and the application of knowledge.

Learning is solidly translated , into practical skills , that allow the student to better integrate into the real world.

Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.

Students like to feel that the effort they put into their studies—
is worthwhile. This then translates into a greater interest in
learning and more time dedicated to working on the course.

04

03



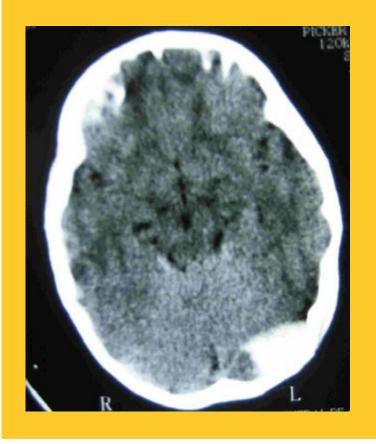
The Student will be able to Learn with the Advantages of having Access to Simulated Learning Environments and the Learning-by-observation Approach, Learning from an Expert"

An immersive system of knowledge transmission, through participation in the resolving real problems and supported by the best audiovisual technology on the educational market".

Learning with the Relearning method will allow you, besides learning and consolidating what you have learned in a more effective way, to achieve your training goals with more speed and less effort.



Metodology | 29 tech



At the forefront of world pedagogy, this successful method has managed to improve the overall satisfaction levels of professionals who complete the courses, with respect to the quality indicators of the best online university in Spanish-speaking countries. The teaching quality, the quality of the materials, the structure of the course and the objectives achieved were rated as very positive.

With more than 40,000 Teachers trained in this methodology and an international satisfaction level of 8.01, relearning has proven to be at the height of the most demanding assessment environments.

In our Postgraduate Diploma, learning is not a linear process, but happens in a spiral (we learn, unlearn, forget and relearn); that is why we combine each of these elements concentrically.

More than 40,000 Teachers have been trained through this methodology, achieving unprecedented success. All this in a highly demanding environment, with the highest standards of evaluation and monitoring.

This training will be based, above all, on experience. A process in which you will test the knowledge you will acquire, consolidating and improving it gradually.

In this Postgraduate Diploma you will have access to the best educational material, prepared with you in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Video Education Techniques and Procedures

We introduce you to the latest techniques, a the latest educational advances, and to the forefront of Education today. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



Interactive Summaries

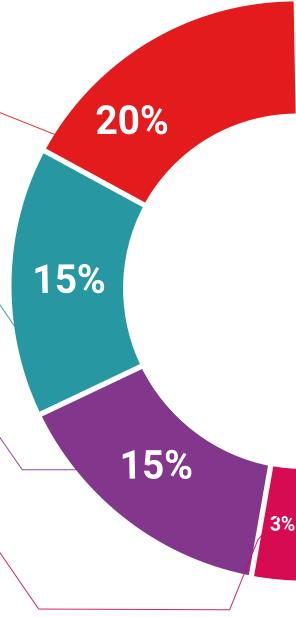
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge. This unique training system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Participation in this course will give you access to a virtual library where you will be able to complement and keep your training updated with the latest articles on the subject, consensus documents, international guidelines...

An invaluable resource that you will be able to use even when you finish your training period with us.



17% 7% 3%

Expert-Led Case Studies and Case Analysis

Through the narratives of expert professionals, it is possible to acquire a high degree of understanding of the most frequent problematic situations. The professional's healthcare practice is not alien to the context in which it takes place. If we want to train ourselves to improve our professional practice, this training must be situated within the context in which it takes place.



Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout the program through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



Classes

Observation of an expert performing a task is the most effective way of learning. It is called Learning from an Expert: a proven way to reinforce knowledge and memory of what has been learned. For this reason, we include this type of learning through master classes in our courses.

There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an expert strengthens knowledge and recall, and generates confidence in our future difficult decisions.



Quick Action Guides

One of the most important functions of our team is to select those contents considered essential and present them in the form of worksheets or quick action guides to facilitate their understanding.







tech 34 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Update on Major Spinal Cord Disorders and Hematologic Neoplasms** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Diploma in Update on Major Spinal Cord Disorders and Hematologic Neoplasms

Modality: online

Duration: 6 months

Accreditation: 20 ECTS



^{*}Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

health

guarantee

technology

community

technology

Postgraduate Diploma

Update on Major Spinal Cord Disorders and Hematologic Neoplasms

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 20 ECTS
- » Schedule: at your own pace
- » Exams: online





