



Postgraduate Diploma

New Developments in Hemorrhagic Disorders from Physiology to Treatment

» Modality: Online

» Duration: 6 months.

» Certificate: TECH Global University

» Accreditation: 20 ECTS» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/us/medicine/postgraduate-certificate/new-developments-major-hemorrhagic-disorders

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tech 06 | Introduction

Given the increase of pathologies related to bleeding, blood coagulation problems mean a great danger to the human body, therefore, intervention techniques and procedures have changed, representing a great advance in the field for the management of these diseases and conditions. Because of this, TECH has designed this program, which delves into the necessary aspects and required by the current hematology.

It is a 100% online program, filled with audiovisual material, complementary readings and exercises based on real cases. Therefore, medical professionals will acquire a series of specific knowledge that will lead them to broaden their current outlook, delving into the necessary postulates to address current pathologies in the best way.

The didactic resources of this program have been designed by experts and specialists in hematology, including a series of Masterclasses given by a world reference in the area, which guarantees that the physician will find new and rigorous information in the content. Additionally, it should be noted that, as it is a virtual program, it will not be necessary to attend classes in person or to travel to an educational center, since it can be carried out using a device with an Internet connection.

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Get up to date with the recent updates in Hemorrhagic Disorders, and become an expert in the management of coagulation pathologies". This Postgraduate Diploma in New Developments in Hemorrhagic Disorders from Physiology to Treatment contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- The development of clinical cases presented by experts in hematology
- Its graphic, schematic and practical contents provide scientific and assistance information on those disciplines that are essential for professional practice
- Diagnostic therapeutic developments on assessment, diagnosis, and treatment in hematology patients
- Practical exercises where the self-assessment process can be used 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.



This program will allow you to combine your work in healthcare with the academic sector, so that you will be able to delve into new updates at the times of your choice."

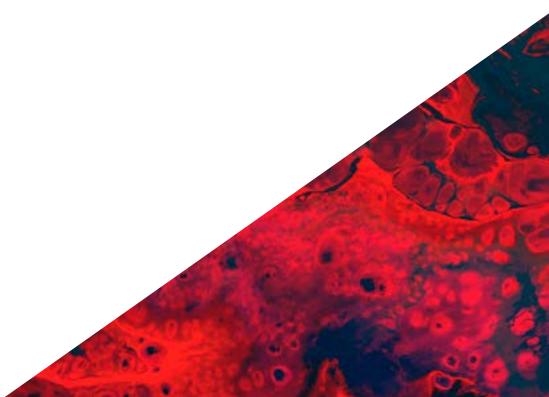
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Take a step further and get up to date with the latest developments in intravascular coagulation.

Enroll now and delve into the most relevant and innovative aspects of this Postgraduate Diploma.







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This program will give you a sense of security for the future challenges of the field".

tech 10 | Objectives



General Objective

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.





Module 1. Current Events in Physiology of Hemostasis

- Look in depth at epidemiological studies on morbimortality due to hematological disorders
- Delve into, the most up-to-date scientific evidence on the mechanisms of action, adverse effects, dosage, and use of drugs to treat these diseases
- Explain the pathophysiological and pathogenic interrelationships between each of these diseases in morbidity and mortality

Module 2. Update on Coagulation, Thrombosis, and Fibrinolysis Tests

- Identify in detail the latest advances in coagulation, thrombosis and fibrinolysis tests
- · Recognize the main medical test extraction instruments
- Analyze the different types of results obtained after the tests have been performed
- Identify the main treatments and intervention models in cases of blood coagulation, thrombosis and fibrinolysis

Module 3. New Developments in Major Hemorrhagic Disorders

- 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
- Explain the complex pathophysiologic and etiopathogenic interrelationships in the mechanisms of hematologic disease onset

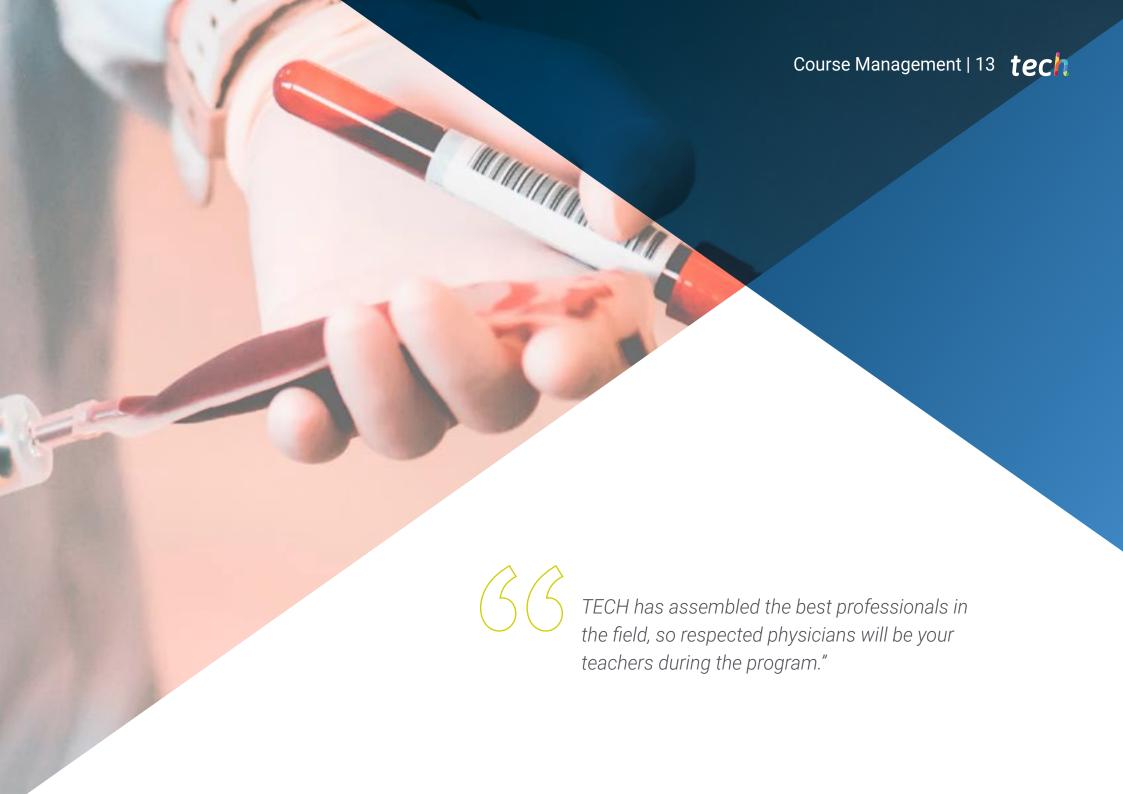
Module 4. Update on Antihemorrhagics

- Recognize the main antihemorrhagic updates that prevent blood loss
- Delve into the most innovative alternatives for blood preservation
- Emphasize the development of skills to treat the hemorrhage



Download the content of this program to your trusted device and delve into it as many times as you like."





International Guest Director

Dr. Joseph Hai Oved is a Pediatrician specialized in Hemato-oncology at the Memorial Sloane Kettering Cancer Center, considered one of the best cancer centers in the world. His work focuses on stem cell and bone marrow transplants, 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, especially stands out.

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. It 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 led to advances in 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 for many of these organizations, where they discuss the potential for 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 area, 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. Furthermore, he also obtained a Fellowship in immunologyfrom the Weizmann Institute of Science, considered one of the most advanced multidisciplinary research institutions in the world.



Dr. Oved, Joseph Hai

- Pediatric Hemato-oncologist at Memorial Sloan Kettering Cancer Center, New York, United States
- 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 the Children's Hospital of Philadelphia
- PhD in Medicine at the NYU School of Medicine
- Fellowship in Pediatric Hemato-Oncology at the Children's Hospital of Philadelphia
- Internship in pediatrics at New York-Presbyterian/Weill Cornell Medical College



Thanks to TECH you will be able to learn with the best professionals in the world"

Guest Director



Dr. Martínez López, Joaquín

- Head of the Hematology Department of the 12 de Octubre University Hospital
- President of Altum Sequencing
- Director of the Translational Research Group and the Early Clinical Trials Unit in Hematology at the 12 de Octubre University Hospital
- Director of the CRIS Foundation against Cancer
- PhD in Medicine from the Complutense University of Madrid.
- Degree in Medicine from the University of Granada
- Practical Stay in Cell Therapy at the University of Toronto

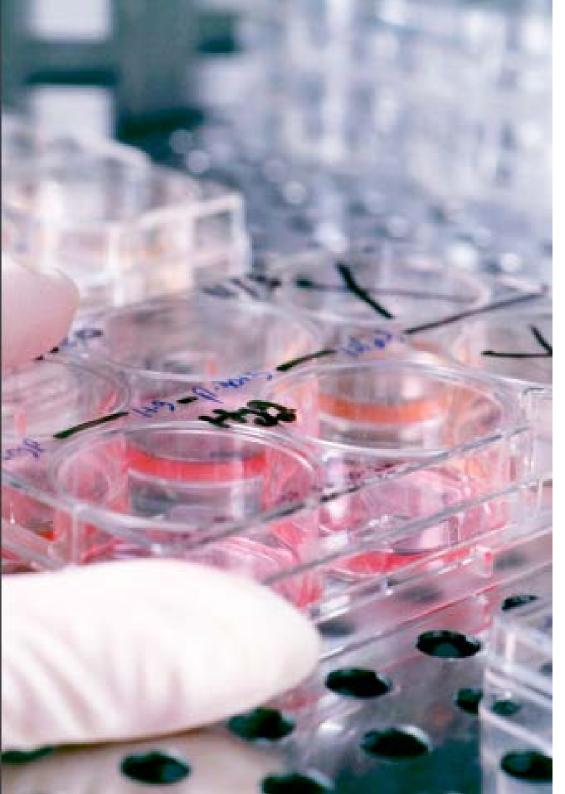
Professors

Dr. Rodríguez Rodríguez, Mario

- * Specialist in Thrombophilia and Hemostasis at the 12 de Octubre University Hospital
- Specialist in Thrombophilia and Hemostasis and in the Basic and Special Coagulation Laboratory at the 12 de Octubre University Hospital
- Participation in quality work for ENAC accreditation in the coagulation laboratory at the 12 de Octubre University Hospital
- Graduate in Medicine and Surgery from the Complutense University of Madrid
- * Specialty in Hematology and Hemotherapy at the 12 de Octubre University Hospital

Dr. Sánchez Pina, José María

- Specialist in Hospitalization and Hematopoietic Transplantation at the 12 de Octubre University Hospital
- Member of the Cell Therapy Group at the 12 de Octubre University Hospital
- * Degree in Medicine from the University of Alcalá
- Specialty in Hematology and Hemotherapy at the 12 de Octubre University Hospital
- Master's Degree in Hematopoietic Transplantation 4th Edition by the University of Valencia



Course Management | 17 tech

Dr. Carreño Gómez-Tarragona, Gonzalo

- Hematology and Hemotherapy Service of the 12 de Octubre University Hospital
- * Researcher Specializing in Molecular Etiopathogenesis of Hematological Neoplasms
- Degree in Medicine from the Autonomous University Madrid.
- Master's Degree in Hematopoietic Transplantation from the University of Valencia
- Member of the Clinical Research Ethics Committee of the 12 de Octubre University Hospital

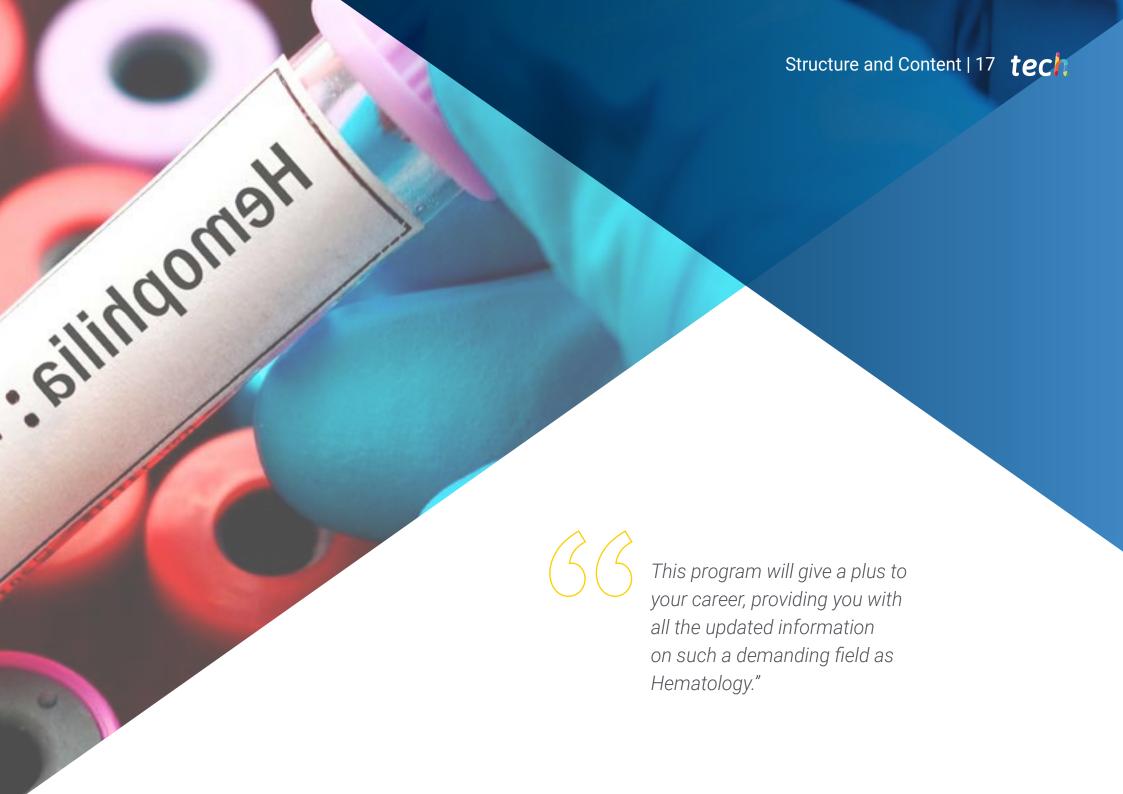
Dr. Paciello Coronel, María Liz

- Specialty in Hematology and Hemotherapy at the 12 de Octubre University Hospital
- Hematology resident tutor at 12 de Octubre Hospital
- Collaborator in clinical trials as principal investigator and sub-investigator
- Graduated in Medicine and Surgery from UNA
- Specialty in Hematology and Hemotherapy at La Fe University Hospital



Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

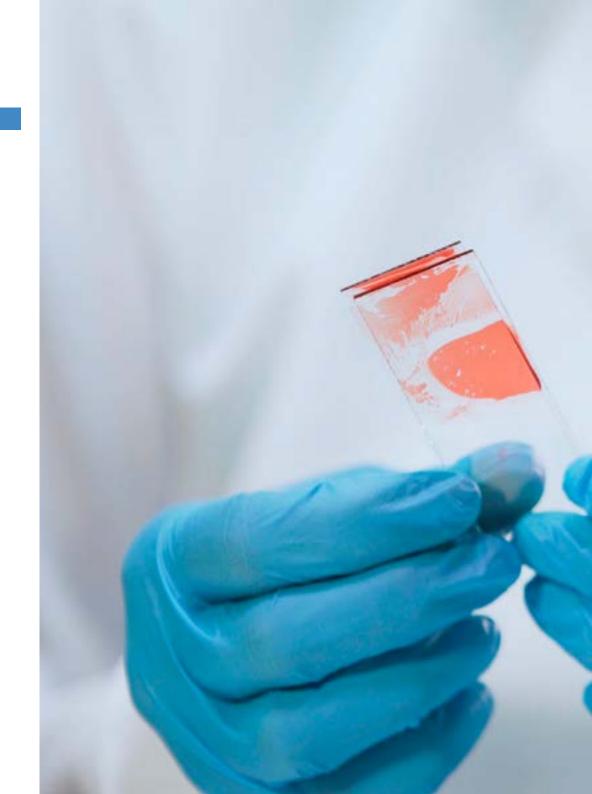




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Module 1. Current Events in Physiology of Hemostasis

- 1.1. Update on the Biopathology of Hemostasis Types
 - 1.1.1. Primary Hemostasis
 - 1.1.2. Secondary Hemostasis
- 1.2. Advances in Vascular Endothelium Biology and Functions
 - 1.2.1. Vascular Endothelium Biology
 - 1.2.2. Vascular Endothelium Functions
 - 1.2.3. Main Vascular Endothelial Mediators
 - 1.2.4. Endothelial Dysfunction
- 1.3. Platelets and their Role in Coagulation: Recent Discoveries
 - 1.3.1. Platelet Formation
 - 1.3.2. Platelet Functions and Mediators
 - 1.3.3. Platelets in Hemostasis
- 1.4. Plasma Factors and the Coagulation Cascade: From Research to the Clinic
 - 1.4.1. Synthesis and Structure of Coagulation Factors
 - 1.4.2. Functions of Plasma Coagulation Factors in the Coagulation Cascade
 - 1.4.3. Coagulation Factor Deficiency
- 1.5. Cofactors Necessary for Blood Coagulation
 - 1.5.1. Vitamin K and Coagulation
 - 1.5.2. Prekallikrein
 - 1.5.3. High Molecular Weight Cininogen
 - 1.5.4. Von Willebrand Factor
- 1.6. Physiological Inhibitors of Coagulation
 - 1.6.1. Antithrombin
 - 1.6.2. Protein C- Protein S System
 - 1.6.3. Antitrypsins
 - 1.6.4. Antiplasmins
 - 1.6.5. Other Coagulation Inhibitor Proteins
- 1.7. Current Events in Pregnancy and Hemostasis
 - 1.7.1. Hemostasis Changes during Pregnancy
 - 1.7.2. Fibrinolysis Changes during Pregnancy
- 1.8. New Developments in Hemostasis in Hepatic Insufficiency and Renal Insufficiency





Structure and Content | 19 tech

- 1.8.1. Acute Hepatic Insufficiency and Hemostatic Disorders
- 1.8.2. Chronic Hepatic Insufficiency and Hemostatic Disorders
- 1.8.3. Hemostasis in Chronic Kidney Disease
- 1.8.4. Hemostasis in Patients with Renal Function Replacement Treatment

Module 2. Update on Coagulation, Thrombosis, and Fibrinolysis Tests

- 2.1. Primary and Secondary Hemostasis Evaluation Tests
 - 2.1.1. Tests to Assess the Role of the Vascular Endothelium
 - 2.1.2. Tests to Assess the Role of Platelets in Hemostasis
 - 2.1.3. Tests that Assess the Role of Coagulation Factors in the Enzymatic Cascade
- 2.2. Interpretation of Prothrombin, Thrombin, and Activated Thromboplastin Times
 - 2.2.1. Prothrombin Time Interpretation
 - 2.2.2. Thrombin Time Interpretation
 - 2.2.3. Interpretation of Activated Thromboplastin Time
- 2.3. Usefulness of Thromboelastography: Its Current Role
 - 2.3.1. Definition
 - 2.3.2. Use
 - 2.3.3. Interpretation
- 2.4. Fibrinolysis Tests: The Mediators of Tissue Reperfusion
 - 2.4.1. Tests that Assess Fibrinolysis
 - 2.4.2. Uses
 - 2.4.3. Interpretation
- 2.5. Diagnosis of Hemophilia: Traditional and the Latest Techniques
 - 2.5.1. Types of Hemophilia
 - 2.5.2. Tests to Diagnose Hemophilia
- 2.6. Monitoring Coagulation in Patients with Critical Bleeding Disorders
 - 2.6.1. Hemostasis in Critically III Patients
 - 2.6.2. Tests for Monitoring Bleeding Disorders in Critically III Patients
- 2.7. Laboratory Monitoring of Patients on Oral Anticoagulants
 - 2.7.1. Traditional and New Oral Anticoagulants
 - 2.7.2. Evidence for Monitoring Patients on Direct Oral Anticoagulants
- 2.8. Laboratory Monitoring in Patients Treated with Heparins

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- 2.8.1. Heparins in Anticoagulant Treatment
- 2.8.2. Tests for Monitoring Heparin Treatment

Module 3. New Developments in Major Hemorrhagic Disorders

- 3.1. Vascular Hemorrhagic Disorders
 - 3.1.1. Definition
 - 3.1.2. Epidemiology
 - 3.1.3. Clinical Manifestations
 - 3.1.4. Diagnostic Difficulties
 - 3.1.5. Treatment Developments
- 3.2. Platelet Hemorrhagic Disorders
 - 3.2.1. Definition
 - 3.2.2. Epidemiology and Etiology
 - 3.2.3. Clinical Manifestations
 - 3.2.4. Diagnostic Complexities
 - 3.2.5. New Treatment Approaches
- 3.3. Hemophilia
 - 3.3.1. Definition
 - 3.3.2. Epidemiology
 - 3.3.3. Clinical Manifestations
 - 3.3.4. Diagnosis
 - 3.3.5. Treatment and Current Issues in Electrical Therapy
- 3.4. Von Willebrand Disease: Diagnostic and Therapeutic Challenge
 - 3.4.1. Definition
 - 3.4.2. Epidemiology
 - 3.4.3. Clinical Manifestations
 - 3.4.4. Diagnosis by Screening Tests
 - 3.4.5. Treatment
- 3.5. Hemorrhagic Disorders due to Vitamin K Deficiency
 - 3.5.1. Definition
 - 3.5.2. Epidemiology
 - 3.5.3. Clinical Manifestations

- 3.5.4. Etiological Diagnosis
- 3.5.5. Treatment Plans
- 8.6. Hemorrhagic Disorders due to Excess Anticoagulants
 - 3.6.1. Definition
 - 3.6.2. Epidemiology
 - 3.6.3. Clinical Manifestations
 - 3.6.4. Diagnostic Tests
 - 3.6.5. Treatment Complexities
- 3.7. Acquired Hemorrhagic Disorders
 - 3.7.1. Definition
 - 3.7.2. Epidemiology
 - 3.7.3. Clinical Manifestations
 - 3.7.4. Diagnosis: The Role of Necessary Tests
 - 3.7.5. Treatment
- 3.8. Disseminated Intravascular Coagulation: Recent Findings
 - 3.8.1. Definition
 - 3.8.2. Epidemiology and Etiology
 - 3.8.3. Clinical Manifestations
 - 3.8.4. Use of Diagnostic Tests
 - 3.8.5. Alternative Treatments

Module 4. Update on Antihemorrhagics

- 4.1. Antihemorrhagic Drugs
 - 4.1.1. Definitions
 - 4.1.2. Main Drugs
 - 4.1.3. Mechanism of Action
 - 4.1.4. Main Indications
- 4.2. Use of Vitamin K in Hemorrhagic Disorders
 - 4.2.1. Indication of Vitamin K in Hemorrhagic Disorders
 - 4.2.2. Pharmacokinetics and Pharmacodynamics
 - 4.2.3. Presentation and Dosage
- 4.3. Coagulation Factor Concentrate



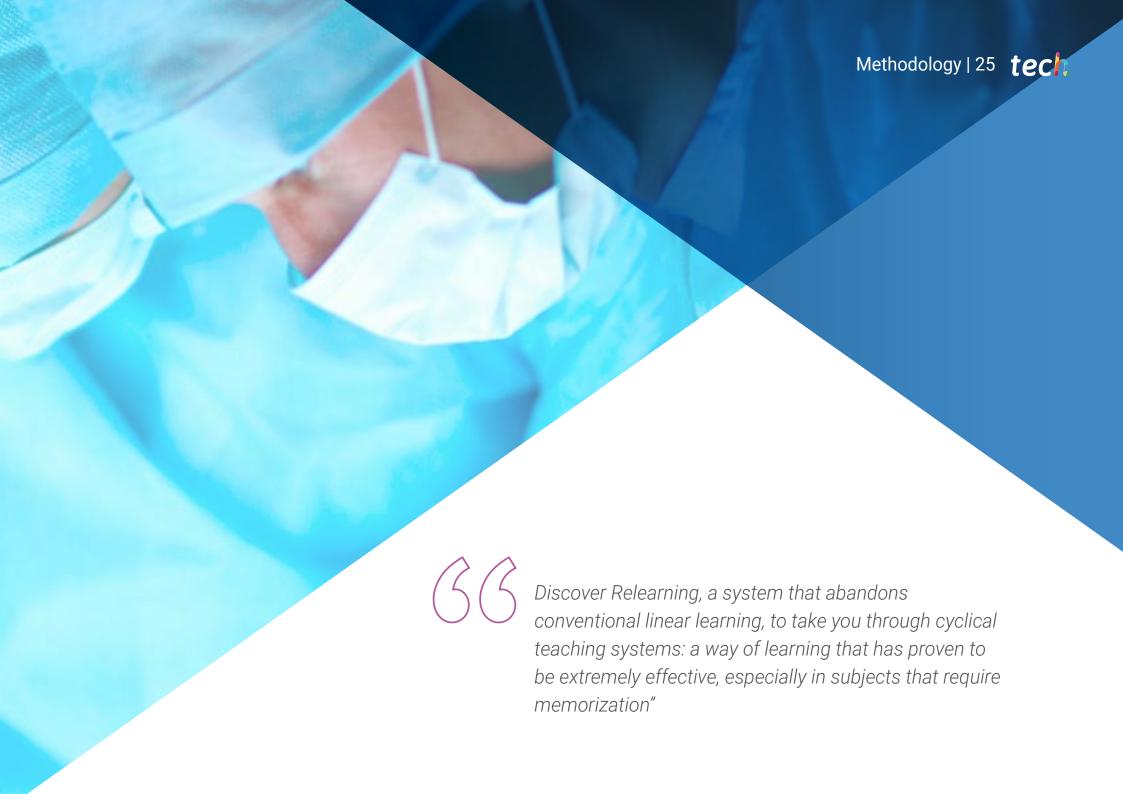
Structure and Content | 21 tech

- Therapeutic Indications
- Pharmacokinetics and Pharmacodynamics 4.3.2.
- 4.3.3. Presentation and Dosage
- Use of Fresh Frozen Plasma and Protamine Sulfate
 - Therapeutic Indications
 - Pharmacokinetics and Pharmacodynamics 4.4.2.
 - Presentation and Dosage
- Latest Recommendations for the Use of Platelets
 - Therapeutic Indications
 - Pharmacokinetics and Pharmacodynamics 4.5.2.
 - Presentation and Dosage 4.5.3.
- Platelet Aggregation Inhibitors: The Reality of Use
 - Therapeutic Indications
 - 4.6.2. Pharmacokinetics and Pharmacodynamics
 - Presentation and Dosage
- Capillary Protective and Hemostatic Vasoconstrictor Drugs
 - 4.7.1. Therapeutic Indications
 - Pharmacokinetics and Pharmacodynamics
 - 4.7.3. Presentation and Dosage
- Antifibrinolytics
 - 4.8.1. Therapeutic Indications
 - Pharmacokinetics and Pharmacodynamics
 - 4.8.3. Presentation and Dosage



A unique, key, and decisive educational experience to boost your professional development"





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At TECH, we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, 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 power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.



Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method.

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

- 1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. 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.



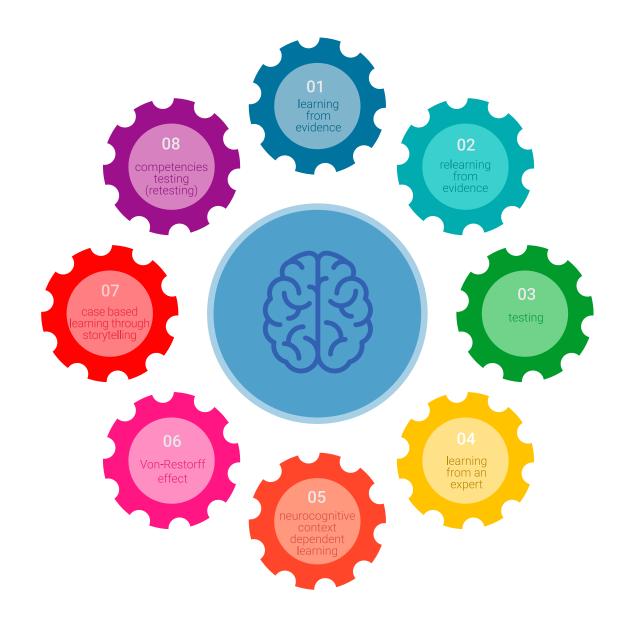


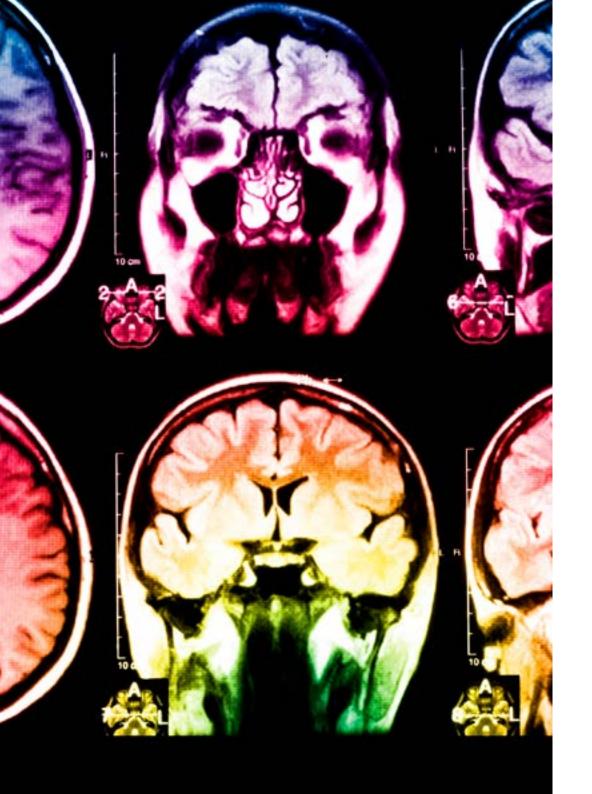
Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-theart software to facilitate immersive learning.





Methodology | 29 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals 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.

These contents are then adapted in audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high-quality pieces in each and every one of the materials that are made available to the student.



Surgical Techniques and Procedures on Video

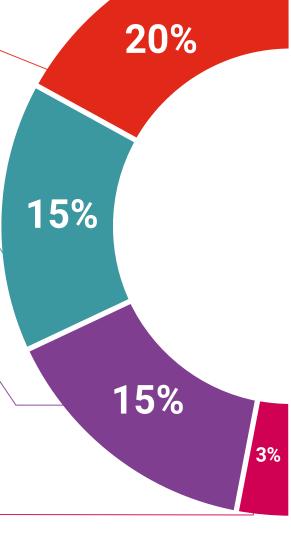
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".





Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically assess and re-assess students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts.

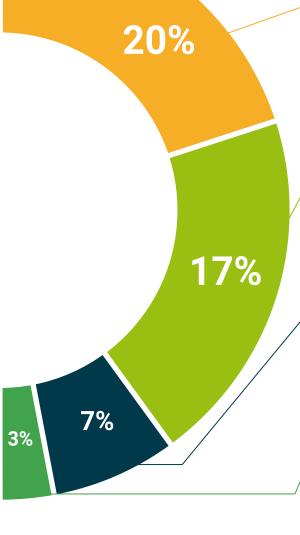
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.









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This program will allow you to obtain a **Postgraduate Diploma in New Developments in Hemorrhagic Disorders from Physiology to Treatment** 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 New Developments in Hemorrhagic Disorders from Physiology to Treatment

ECTS: 20

Official No of Hours: 500 hours.



Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Diploma in New Developments in Hemorrhagic Disorders from Physiology to Treatment

This is a private qualification of 150 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



^{*}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

tech global
university

Postgraduate Diploma

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