



Cardiovascular and CNS Infections in the Emergency Room

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/medicine/postgraduate-certificate/postgraduate-certificate-cardiovascular-cns-infections-emergency-room

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#### tech 06 | Introduction

Emergency physicians face new professional challenges every day, demanding great agility in the diagnosis and treatment of the pathologies they must treat during their working days. Thus, when a patient comes to the emergency room, the health care provider must be able to find out, early on, what the disease is, as this is the only way to receive effective treatment to improve symptoms. In addition, it must be taken into account that a wrong diagnosis can make the difference between the patient's survival or not, since in this area patients already present with advanced symptoms.

For this reason, these professionals must be constantly updating their knowledge, allowing them to keep up to date with the main novelties in the field and know the most appropriate therapies for each disease. In order to meet this objective of quality higher education, at TECH we have designed this comprehensive course on cardiovascular and CNS infections in the Emergency Room. A unique opportunity to learn from the leading professionals in this field, in a comfortable and uncomplicated way.

Specifically, the program includes the classic aspects in the management of infectious pathology by apparatus or organs, obviously taking into account any updates that may have occurred up to the time of the design of this program. But also, we have incorporated innovative aspects which we believe to be essential in the the correct management of infectious diseases in the current situation of health globalization.

One of the main advantages of this course is that, as it is a 100% online training, the professional will be able to decide when and from where to study, without commitments or obligations, thus being able to combine his or her study time with the rest of his or her daily obligations.

This Postgraduate Certificate in Cardiovascular and the CNS Infections in the Emergency Room contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Clinical symptom cases presented by experts in infectious diseases
- 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 practice
- Therapeutic novelties on intervention in cardiovascular and CNS infections in the emergency department
- Practical exercises where the self-assessment process can be carried out to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Special emphasis on research methodologies
- 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



Update your knowledge through this program and give a boost to your profession. You will be able to help your patients more effectively"



This Postgraduate Certificate is the best investment you can make in the selection of an up-to-date program for two reasons: in addition to updating your knowledge of Cardiovascular and CNS Infections in the Emergency Room, you will obtain a Postgraduate Certificate from: TECH"

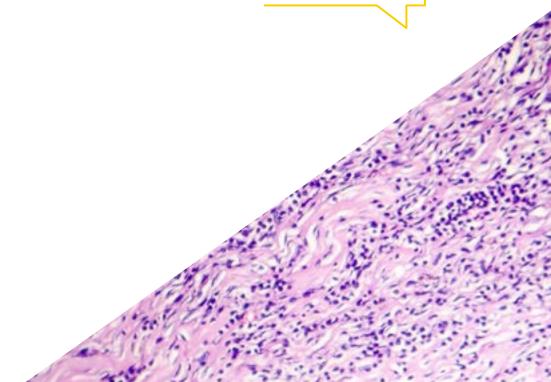
Its teaching staff includes professionals belonging to the field of Cardiovascular and CNS Infections in the Emergency Room, who contribute their work experience to this training, in addition to renowned specialists from leading scientific societies.

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 an immersive training experience designed to train for real-life situations.

This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the academic year. For this purpose, the professional will be assisted by an innovative interactive video system developed by renowned experts in the field of cardiovascular and CNS infections in the Emergency Room, with extensive teaching experience.

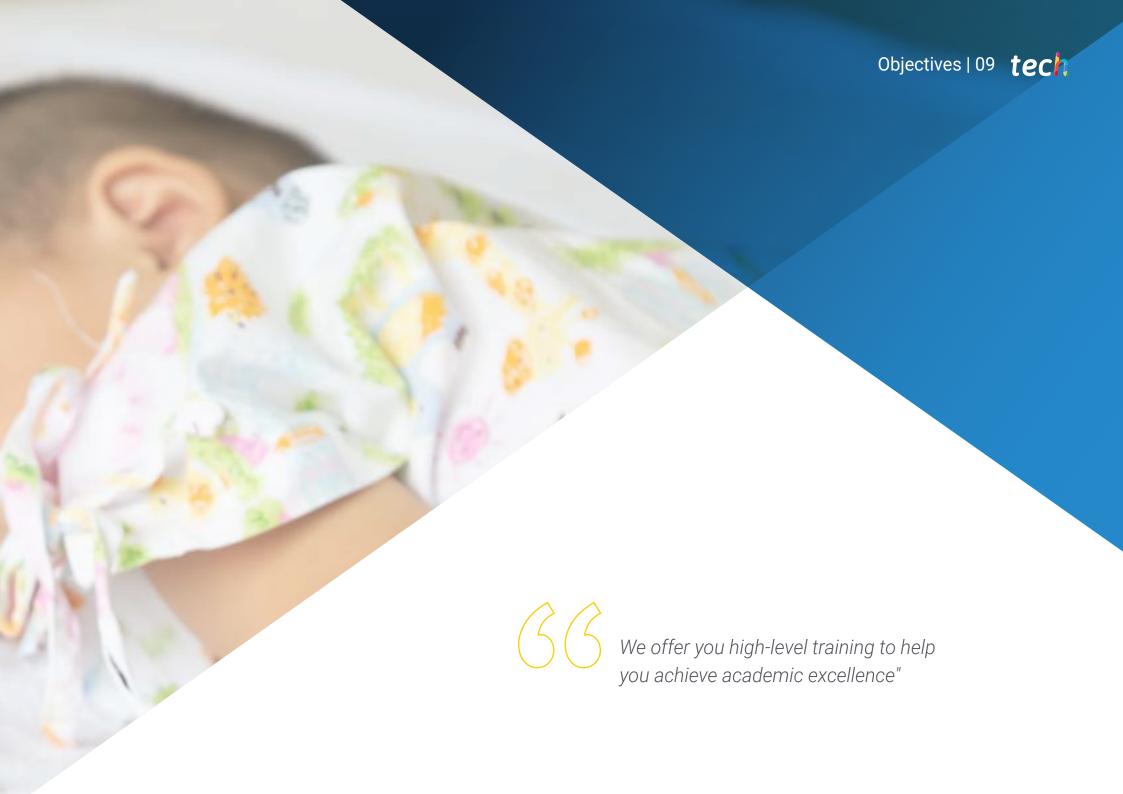
Increase your decision-making confidence by updating your knowledge through this program.

Take the opportunity to learn about the latest advances in Cardiovascular and CNS Infections in the Emergency Room and improve the care of your patients.



# 02 Objectives

The Postgraduate Certificate in Cardiovascular infections and the CNS in the Emergency Room is aimed at facilitating the performance of the professional dedicated to the treatment of urgent infectious pathology in all areas, , but , especially in the emergency room.



# tech 10 | Objectives



# **General Objectives**

- Provide the theoretical knowledge necessary to understand the environment in which professional care is given to patients with infectious diseases..
- Provide the appropriate treatment in the different cases of infectious diseases.
- Gain in-depth understanding of the areas in which professionals must be trained, in order for them to be able to provide the best practice when treating infectious diseases.







#### **Specific Objectives**

- Explain the diagnosis and treatment of as endocarditis and intravascular infections in the emergency room.
- Explain the diagnosis and treatment of septic lathrombophlebitis in the emergency room.
- Explain the diagnosis and treatment of intravascular devices infections in the emergency room.
- Explain the diagnosis and treatment of tunneled and non-tunneled catheter infection in the emergency room.
- Explain the diagnosis and treatment of pacemaker infections in the emergency room.
- Explain the emergency room diagnosis and treatment of infection of other devices.
- Explain the diagnosis and treatment of pericarditis and myocarditis in the emergency room.
- Explain the diagnosis and treatment of mediastinitis in the emergency room.
- Explain the diagnosis and treatment of meningitis in the emergency room.
- Explain the diagnosis and treatment of encephalitis in the emergency room.
- Explain the diagnosis and treatment of myelitis in the emergency room.
- Explain the diagnosis and treatment of a cerebral abscess in the emergency room.
- Explain the diagnosis and treatment of subdural empyema, epidural abscess and intracranial thrombophlebitis in the emergency room.
- Explain the diagnosis and treatment of liver and CSF shunt infections in the emergency room.







#### tech 14 | Course Management

#### Management



#### Dr. García del Toro, Miguel

- PhD in Medicine from the University of Valencia
- Head of the Infectious Diseases Service at the Consortium General University Hospital in Valencia
- 50 national and international publications in journals and books, 33 of them indexed in Pubmed and/or Scopus.
- President Congress of the National Group for the Study of Hepatitis of the Society for Infectious Diseases and Clinical Microbiology 2017
- More than 200 communications to National and International Congresses in the specialty of Infectious Diseases, HIV and Viral Hepatitis.
- Principal Investigator of some thirty Clinical Trials and/or Research Projects and collaborating researcher



#### Dr. García Rodríguez, Magdalena

- Degree in Medicine and Surgery
- Specialist in Internal Medicine
- Attending Physician in the Infectious Diseases Unit and the Consorcio General Hospital Valencia
- Head of the International Health and Travel Advice Section
- Author of several publication and research projects
- Founding member and advisor of the Chagas Disease Association of the Valencian Community
- Member of a vaccine study group for the Spanish Society of Infectious Diseases and Clinical Microbiology.
- Member of a Malaria study group for the Spanish Society of Infectious Diseases and Clinical Microbiology.



#### Dr. Ricart Olmos, María del Carmen

- Degree in Medicine and Surgery
- Specialist in Internal Medicine
- Attending Physician in the Infectious Diseases Unit and the Consorcio General University Hospital, Valencia
- Author of several publication and research projects
- Editor of the Consensus Document on Age and Human Immunodeficiency Virus Infection Expert Group of the Secretariat of the National AIDS Plan (SPNS), Spanish Society of Geriatrics and Gerontology (SEGG)
- Master's Degree in Infectious Diseases in Intensive Care





#### tech 18 | Structure and Content

#### Module 1. Infections of Organs and Apparatus: Cardiovascular, CNS

- 1.1. Infectious Endocarditis
  - 1.1.1. Epidemiology.
  - 1.1.2. Etiology.
  - 1.1.3. Clinical Presentation.
  - 1.1.4. Diagnosis.
  - 1.1.5. Treatment.
  - 1.1.6. Prevention.
- 1.2. Infection of Intravascular Devices.
  - 1.2.1. Infections Associated with Intravascular Catheter.
  - 1.2.2. Infections Related to Implantable Electronic Cardiovascular Implantable Cardiovascular Devices.
- 1.3. Acute Pericarditis.
  - 1.3.1. Definition.
  - 1.3.2. Incessant and Chronic Pericarditis.
  - 1.3.3. Recurrent Pericarditis
  - 1.3.4. Myopericarditis
- 1.4. Mediastinitis.
  - 1.4.1. Acute Mediastinitis
  - 1.4.2. Sclerosing Mediastinitis
- 1.5. Meningitis.
  - 1.5.1. Epidemiology and Etiopathogenesis.
  - 1.5.2. Diagnosis of Meningitis: Clinical and Laboratory.
  - 1.5.3. Antimicrobial Treatment
- 1.6. Encephalitis.
  - 1.6.1. Epidemiology and Etiopathogenesis.
  - 1.6.2. Diagnosis of Encephalitis: Clinical and Complementary Evaluations.
  - 1.6.3. Antimicrobial Treatment





#### Structure and Content | 19 tech

- Myelitis 1.7.
  - 1.7.1. Epidemiology and Etiopathogenesis.
  - Clinical Presentation.
  - Diagnosis.
  - Treatment.
- Cerebral Absess
  - 1.8.1. Etiopathogenesis.
  - Clinical Manifestations and Diagnosis.
  - 1.8.3. Treatment.
- Subdural Empyema, Epidural Abscess and Intracranial Thrombophlebitis.
  - 1.9.1. Subdural Empyema: Etiopathogenesis, Clinical Manifestations, Diagnosis and
  - 1.9.2. Epidural Abscess: Etiopathogenesis, Clinical Manifestations, Diagnosis and
  - 1.9.3. Septic Thrombophlebitis: Etiopathogenesis, Clinical Manifestations, Diagnosis and Treatment.
- 1.10. CSF Shunt Infections.
  - 1.10.1. Etiopathogenesis.
  - 1.10.2. Clinical Manifestations
  - 1.10.3. Diagnosis.
  - 1.10.4. Treatment.



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





## tech 22 | Methodology

#### At TECH we use the Case Method

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you can 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 potential 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 professional medical 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:

- Students who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on 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.



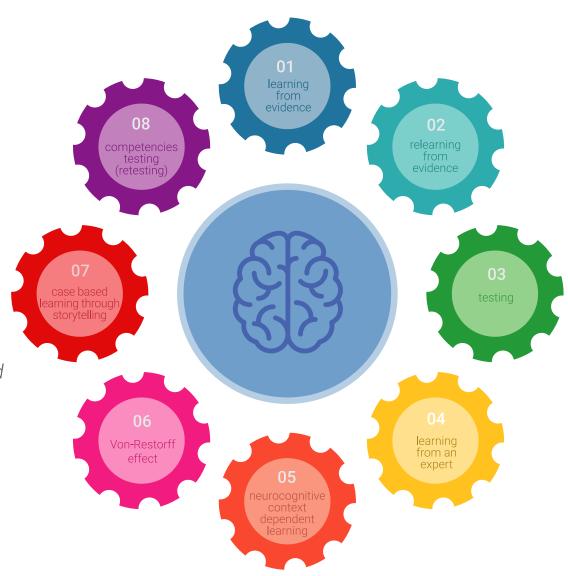


#### **Re-Learning Methodology**

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.

The physician will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.





#### Metodology | 25 tech

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

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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

## tech 26 | Methodology

In this program 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.



#### **Latest Techniques and Procedures on Video**

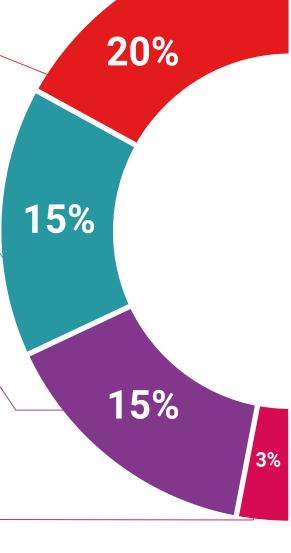
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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 multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.

# 20% 17% 7%

#### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **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

There is scientific evidence suggesting that observing third-party experts can be useful.





#### **Quick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







#### tech 30 | Certificate

This Postgraduate Certificate in Cardiovascular and the CNS Infections in the Emergency Room contains the most complete and up-to-date scientific program on the market.

After students have passed the evaluations, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the **Postgraduate Certificate**, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professionals from career evaluation committees.

Title: Postgraduate Certificate in Cardiovascular and CNS Infections in the Emergency Room

Official Number of Hours: 150



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.



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