**Postgraduate Certificate** Febrile Syndrome and Fever in the Emergency Room



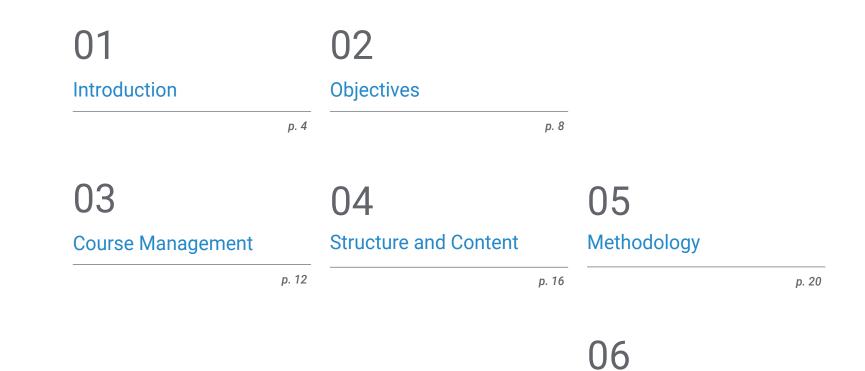


# **Postgraduate Certificate** Febrile Syndrome and Fever in the Emergency Room

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/febrile-syndrome-fever-emergency-room

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Certificate

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# 01 Introduction

Fever management is one of the main tasks of physicians working with patients with infectious pathologies, as this is one of the main symptoms of these diseases. If you want to increase your training in this field, be sure to specialize with us with this very complete training on Febrile Syndrome and Fever in the Emergency Room. A unique opportunity to learn from leading professionals in the field.



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Fever is one of the main symptoms of infectious diseases, so it is essential to act rigorously to reduce it. Train with us and increase your skills in this field"

## tech 06 | Introduction

Fever is one of the main symptoms caused by infections, as the body tries to fight the microorganisms that cause it by raising the body temperature. However, this survival mechanism generated by the body itself must be treated by professionals to avoid major consequences in patients, so that early action can improve their condition quickly and effectively.

In order to offer a complete training on this aspect to doctors working in the Emergency Room, in TECH we have designed this course, developed by elite professionals in the health area, with the aim that doctors learn how to act at all times. Specifically, the agenda deals with aspects as varied as: the initial approach in acute febrile syndrome, antimicrobials, or the management of fever in different types of patients, according to their own pathologies, among other aspects.

Thus, this very complete training, which has been developed by a team of specialists in the field, will help students to improve their professional skills, obtaining a superior training that will allow them to achieve professional success.

In addition, this course has the advantage that, being a 100% online training, the professional will have the ability to decide when and where to study, without commitments or obligations, thus being able to combine their study time with the rest of their daily obligations. This **Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Room** contains the most complete and up-to-date program on the market. The most important features of the program include:

- · Clinical symptom cases presented by experts in the field
- 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
- Therapeutic developments on intervention in infectious diseases.
- Practical exercises where self-assessment can be used 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

Don't miss the opportunity to specialize in this highly demanded field in the emergency room. You will be able to improve your training and daily work"

## Introduction | 07 tech

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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 Febrile Syndrome and Fever in the Emergency Room, you will obtain a Postgraduate Certificate from: TECH"

Its teaching staff includes a professionals from the field of medicine, who bring the experience of their work to this training, as well as recognised 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 created by renowned and experienced experts in fever management and extensive teaching experience. Increase your decision-making confidence by updating your knowledge through this program.

We offer you the best teaching methodology and a multitude of practical cases that will make studying easier.

# 02 **Objectives**

The **Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Room** is oriented to facilitate the performance of the physician dedicated to the treatment of urgent infectious pathologies in all areas, but, especially in the emergency room.



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Get trained using the latest educational technology, to contribute with quality and safety to decision making and patient care"

# 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 biomarkers used in the clinical diagnosis of infectious disease.
- Define the use of C-reactive protein and procalcitonin in the diagnosis of infectious diseases.
- Define the practical use of non-specific tests for infectious evidence.
- Explain the initial focus in Acute Fever Syndrome.
- Define the action taken in cases of Bacteremia, Sepsis and Septic Shock.
- Explain how to activate the Sepsis Code
- Define the use of different antimicrobials in Fever Syndrome.
- Describe the characteristics of the different types of antimicrobials.
- Define the implications of antimicrobial resistance when selecting treatment.
- Explain the basic steps in the selection of antimicrobials according to the type of host and other extrinsic or environmental factors.
- Explain the concept of empirical antibiotic therapy.
- Describe how to act in the case of beta-lactam allergy.
- Describe the use of antimicrobials and renal function.
- Explain the relationship between fever and the presence of exanthema.
- Explain the relationship between fever and the presence of adenopathies.

- Fever and hematological alterations.
- Explain the association of fever with altered level of consciousness.
- Describe fever management in an elderly patient.
- Describe fever management in a patient in a hemodialysis program.
- Describe fever management in a patient with intravascular devices.
- Describe fever management in a patient with a HIV infection.
- Describe fever management in a patient with iatrogenic immunosuppression.
- Describe fever management in a patient with oncohematological pathology.
- Describe fever management in a patient with febrile neutropenia.
- Describe fever management in a patient in the solid organ transplant patient.
- Explain the implications of cytomegalovirus and BK virus infections in transplant recipients.
- Describe fever management in a patient who has recently undergone surgery.
- Describe the current management of infection of surgical wounds.
- Explain the management of other infections in a patient who has recently undergone surgery.
- Describe fever management in a pregnant patient.
- Explain the use of antibiotic therapy in pregnancy.

# 03 Course Management

The program's teaching staff includes leading a specialists in infectious diseases in the Emergency Room and other related areas, who bring their years of work experience to this training. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.

We have the best professionals of the moment on infectious diseases. Don't miss the opportunity to learn with them"

## 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.

## Course Management | 15 tech



## 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

# 04 Structure and Content

The structure of the contents has been designed by a team of professionals from the best hospitals and universities in the country, aware of the relevance of current training to intervene in the diagnosis, treatment and monitoring of infectious diseases in the emergency room and committed to quality teaching through new educational technologies.

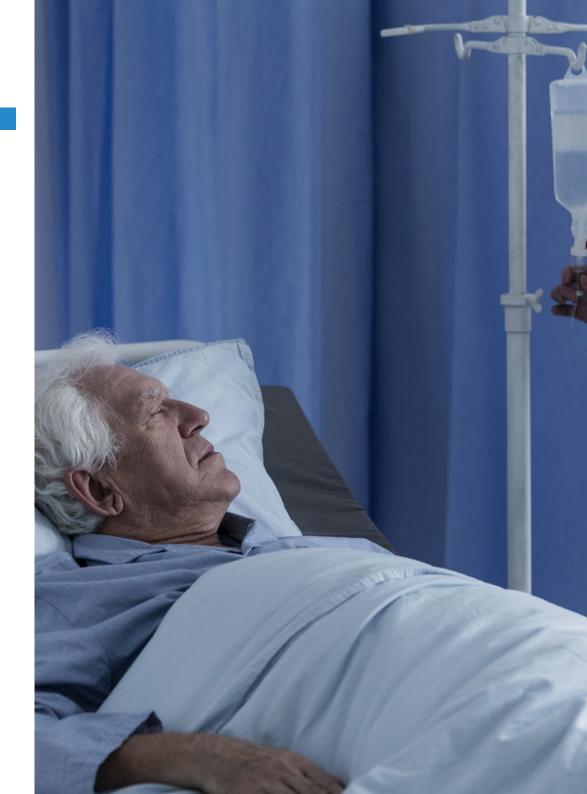
Structure and Content | 17 tech

This course contains the most complete and up-to-date scientific program on the market"

## tech 18 | Structure and Content

### Module 1. Systemic Febrile Syndrome. Antimicrobials:

- 1.1. Biomarkers in Sepsis
  - 1.1.1. Lactate
  - 1.1.2. Procalcitonin
  - 1.1.3. Proadrenomedulin
  - 1.1.4. Combinations
- 1.2. Initial Focus in Acute Fever Syndrome
  - 1.2.1. Initial Management of a Patient with a Fever in the Emergency Department
  - 1.2.2. Antibiotic
  - 1.2.3. Special Categories
  - 1.2.4. Fever of Unknown Origin
  - 1.2.5. Attitude and Destiny of the Patient
- 1.3. Bacteremia, Sepsis and Septic Shock
  - 1.3.1. Definitions According to Consensus Conferences
  - 1.3.2. How to Identify a Patient with Sepsis
  - 1.3.3. Controversies and Limitations of the New Definitions
  - 1.3.4. Managing Sepsis
- 1.4. Antimicrobials:
  - 1.4.1. Concept: What is a Antimicrobial?
  - 1.4.2. Antibacterials
  - 1.4.3. Pregnancy and Breastfeeding
  - 1.4.4. Antifungal



## Structure and Content | 19 tech

# **Module 2.** Emergency Diagnostic and Therapeutic Management of Fever in Special Situations

- 2.1. Fever in Emergencies
  - 2.1.1. General concepts
  - 2.1.2. Action Protocol
  - 2.1.3. Patient Orientation
- 2.2. Fever in an Elderly Patient
  - 2.2.1. General concepts
  - 2.2.2. Characteristics of the Specific Clinical Framework
  - 2.2.3. Points to Remember
- 2.3. Fever in a Hemodialysis Patient
  - 2.3.1. Infections Related to Vascular Access in Hemodialysis
  - 2.3.2. Other Considerations in the Infectious Pathology of a Patient on Dialysis
- 2.4. Fever in the Patient with Intravascular Catheters
  - 2.4.1. Clinical manifestations
  - 2.4.2. Etiology
  - 2.4.3. Microbiological
  - 2.4.4. Antibiotic
  - 2.4.5. Prevention
- 2.5. Patient with HIV Infection
  - 2.5.1. Pulmonary Syndromes
  - 2.5.2. Neurological syndromes
  - 2.5.3. Other Fever Syndromes
  - 2.5.4. Immune Reconstitution Syndrome
- 2.6. Patient with latrogenic Immunosuppression
  - 2.6.1. Etiology
  - 2.6.2. Diagnostic Approach
  - 2.6.3. Antibiotic

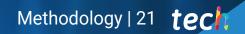
- 2.7. Patient with Onco-hematologic Pathology
  - 2.7.1. Diagnosis and Therapeutic Management of an Onco-hematologic Patient with a Fever
- 2.8. Transplant Recipient of a Solid Organ
  - 2.8.1. Infections in the First Month Post-Transplant
  - 2.8.2. Infections Between the First and Sixth Month Post-Transplant
  - 2.8.3. Infections After the Sixth Month Post-Transplant
  - 2.8.4. Diagnostic Strategy
  - 2.8.5. Empirical Treatment
- 2.9. Patient who has Recently Undergone Surgery
  - 2.9.1. Infection of Surgical Wounds. Current Management
  - 2.9.2. Other Infections in a Patient who has Recently Undergone Surgery
- 2.10. Pregnant Patient
  - 2.10.1. Special Characteristics of a Pregnant Woman
  - 2.10.2. Diagnostic Orientation in the Emergency Department
  - 2.10.3. Treatment and Management in Special Situations
  - 2.10.4. Indications of Admission for Observation and Inpatient Treatment

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

# 05 **Methodology**

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: *Re-learning*.

This teaching system is used in the most prestigious medical schools in the world, and major publications such as the *New England Journal of Medicine* have considered it to be one of the most effective.



Discover Re-learning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

## 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:

1. 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.

 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.



## tech 24 | Methodology

## **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-theart 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 socioeconomic 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.

20%

15%

3%

15%

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.

## Metodology | 27 tech



### **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.

20%

7%

3%

17%



### **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.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



#### **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.

# 06 **Certificate**

The **Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Room** guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by **TECH - Technological University**.



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Successfully complete this training and receive your diploma without the hassle of travel or paperwork"

## tech 30 | Certificate

This **Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Room** contains the most complete and up-to-date program on the market.

After students have passed the evaluations, they will receive their **Postgraduate Certificate** issued **TECH - Technological University.** 

The diploma 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 professional career evaluation committees.

Title: Postgraduate Certificate in Febrile Syndrome and Fever in the Emergency Room Official Number of Hours: 225 h.



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

technological university Postgraduate Certificate Febrile Syndrome and Fever in the Emergency Room » Modality: online » Duration: 12 weeks » Certificate: TECH Technological University » Dedication: 16h/week

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