

Postgraduate Diploma Fever Management in the Emergency Room





Postgraduate Diploma Fever Management in the Emergency Room

Course Modality: Online

Duration: 6 months.

Certificate: TECH - Technological University

17 ECTS Credits

Teaching Hours: 425 hours.

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-fever-management-emergency-room

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01

Introduction

Fever is one of the main symptoms in most infections. Therefore, its diagnosis and treatment is essential in any health area, but in the Emergency Department its importance is even greater, in order to prevent any type of complications in time. Por ello, su diagnóstico y tratamiento es fundamental en cualquier ámbito sanitario, pero en el Servicio de Urgencias su importancia es aún mayor, para prevenir a tiempo cualquier tipo de complicaciones. A unique study opportunity that you cannot miss.





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Infectious diseases can cause fever in most cases. Therefore, physicians must be up to date to apply the best treatments for their decrease”

No person is safe from suffering from an infectious disease and, therefore, at some point in their life they will have a fever. Although it is a common symptom of this type of pathology, its management can be complicated, since, on certain occasions, resistance to treatment can occur, preventing a rapid cure.

To obtain an updated knowledge on the main tools available to physicians to manage fever in patients with infectious diseases, CEU has designed this complete Postgraduate Diploma, with which you can enter into a deep and comprehensive study on this topic.

Specifically, the training program includes classic aspects in the management of fever in infectious pathology by apparatus or organs, incorporating new items for the correct management of infectious diseases in the current scenario of globalization of health. An important part of the program covers the concept of risk prevention, derived from the care of infectious diseases, both for healthcare personnel and the population, going in depth into the measures that can be adopted in the Emergency Department to minimize them. In addition, there will be a space to learn about microbiology tests, systemic febrile syndrome, antimicrobials or fever management in special situations, such as with the elderly patient, with HIV infection or recent surgery, for example. In such a way that they acquire a general knowledge of all the situations in which they may find themselves in the Emergency Department.

On the other hand, being a 100% online training, the professional will have the ability to decide when and from where to study, without commitments or obligations, thus being able to combine their study time with the rest of their daily obligations.

This **Postgraduate Diploma in Fever Management in the Emergency Room** contains the most complete and up-to-date scientific program on the market. The most important features of the Postgraduate Diploma are:

- Clinical symptoms cases presented by experts in fever management in the Emergency Room.
- 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.
- New therapeutic developments in fever management.
- 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.



Immerse yourself in the study of this complete Diploma and improve the care of your patients with infectious pathologies"

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This Postgraduate Diploma is the best investment you can make when selecting an up-to-date program for two reasons: in addition to updating your knowledge of Fever Management in the Emergency Room, you will obtain a qualification by 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 Postgraduate Diploma.

Get trained with the best teaching methodology of the moment and acquire a training of the highest academic level that will allow you to increase your training and the care of your patients.



02 Objectives

The Postgraduate Diploma in Fever Management of in the Emergency Room is oriented to facilitate the performance of the professional in this area dedicated to the treatment of urgent infectious pathology in all areas, but, above all, in the emergency department.





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If your goal is to improve the care of your patients with fevers, do not think twice and train with us. We offer you the best training on the market"



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

- ♦ Define virulence factors and toxins.
- ♦ Identify the main human pathogens in our environment.
- ♦ Explain the different current scenarios of infection in the emergency room.
- ♦ Describe the etiopathogenic profiles of bacterial infection.
- ♦ Describe the etiopathogenic profiles of viral infection.
- ♦ Describe the etiopathogenic profiles of fungal infections.
- ♦ Describe the etiopathogenic profiles of microbacterial infections.
- ♦ Describe the etiopathogenic profiles of parasitic infections.
- ♦ Describe the process of collecting specimens.
- ♦ Define which specimens are most commonly requested in the Emergency Department.
- ♦ Explain the collection of specimens in patients with devices.
- ♦ Describe the management of specimens in the laboratory.
- ♦ Explain the clinical significance of bacterial resistance.
- ♦ Define the techniques available for emergency diagnoses.
- ♦ Describe the interpretation of preliminary results.
- ♦ Explain the analytical interpretation of the different types of samples.
- ♦ Define the procedures in hospitals without on-call microbiologists.
- ♦ Explain the diagnostic techniques that can possibly be performed in the emergency department laboratory.
- ♦ 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.





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Take the opportunity and take the step to get up to date on the latest developments in Fever Management in the Emergency Room”

03

Course Management

The program's teaching staff includes leading specialists in infectious diseases 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.



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The best teachers are at the best university. Don't miss the opportunity to learn with them"

Management



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



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



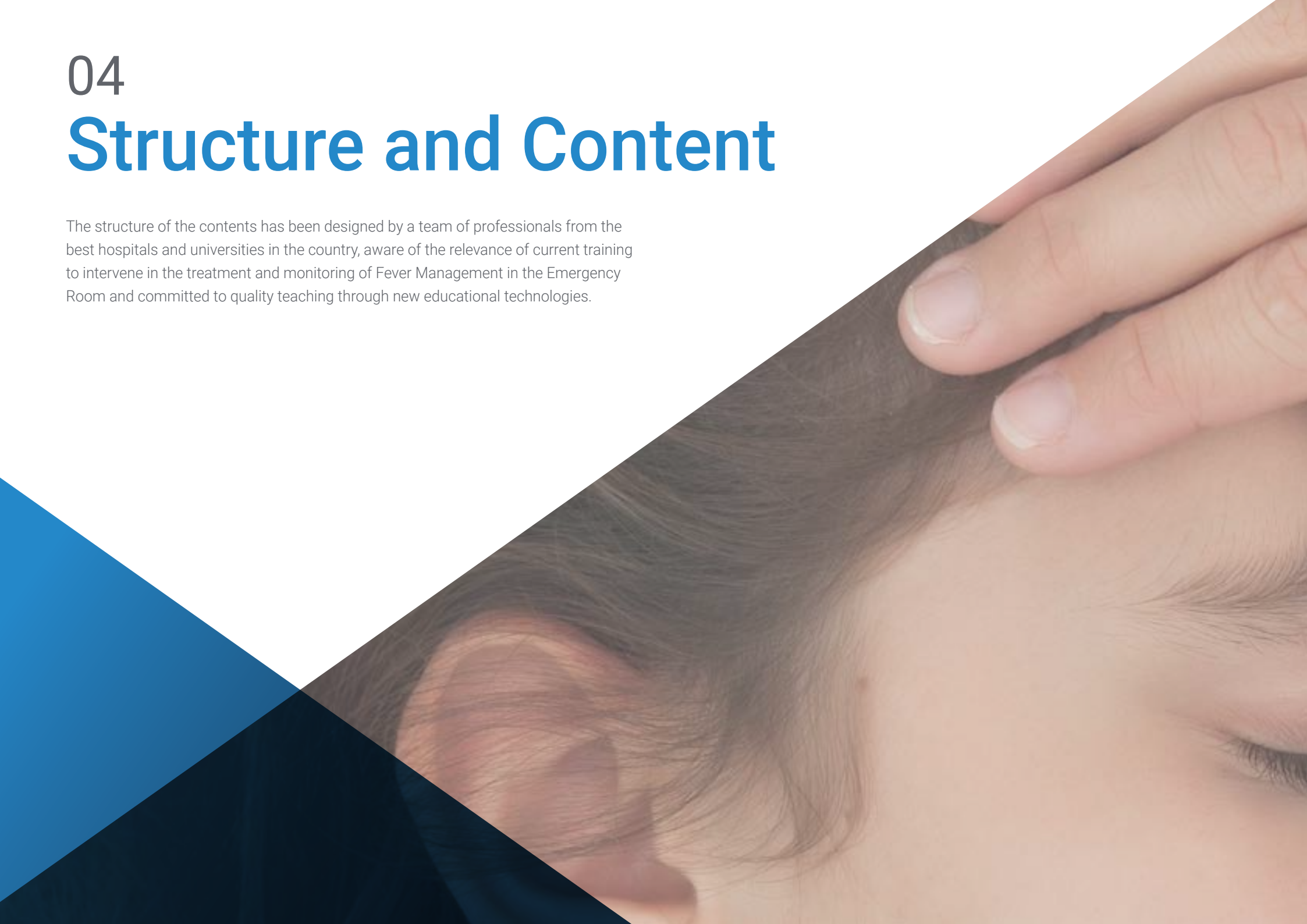
Ricart Olmos, María del Carmen

- 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 treatment and monitoring of Fever Management in the Emergency Room and committed to quality teaching through new educational technologies.





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Our goal is to achieve academic excellence and help you achieve it, and to do so, we have the best teaching program"

Module 1. Up-to-date Information on Infectious Diseases

- 1.1. Principles of Infection.
 - 1.1.1. Virulence Factors and Toxins.
 - 1.1.2. Defensive Mechanisms of the Host.
- 1.2. Main Human Pathogens in our Environment.
 - 1.2.1. Current Epidemiology of the Infection.
 - 1.2.2. Data on a Worldwide Level.
 - 1.2.3. Data in our Environment.
 - 1.2.4. Microbial Resistance
- 1.3. Current Scenarios of Infection in the Emergency Department.
 - 1.3.1. Elderly Patients
 - 1.3.2. Oncology Patients
 - 1.3.3. Chronic Renal Patients on Dialysis.
 - 1.3.4. Transplant Recipient.
 - 1.3.5. HIV Infection
 - 1.3.6. Travellers and Immigrants.
- 1.4. Etiopathogenic Profiles of Infection.
 - 1.4.1. Bacterial Infections.
 - 1.4.2. Viral Infections.
 - 1.4.3. Fungal Infections.
 - 1.4.4. Microbacterial Infections.
 - 1.4.5. Parasitic Infections.





Module 2. The Microbiology Laboratory in the Emergency Department

- 2.1. Process of Sample Collection.
 - 2.1.1. General Considerations for Taking, Conserving and Transporting the Samples for Microbiological Study.
 - 2.1.2. Material for Sample Collection.
- 2.2. Management of Samples in the Laboratory.
 - 2.2.1. Receiving Samples
 - 2.2.2. Processing.
 - 2.2.3. Methods and Techniques used for Microbiological Diagnosis According to the Main Infectious Syndromes.
- 2.3. Techniques Available for Emergency Diagnoses.
 - 2.3.1. Bacteria.
 - 2.3.2. Virus.
 - 2.3.3. Fungi.
 - 2.3.4. Mycobacteria.
 - 2.3.5. Parasites.
- 2.4. Interpretation of Preliminary Results.
 - 2.4.1. Interpretation of Microbiological Diagnostic Tests.
- 2.5. Procedures in Hospitals Without On-call Microbiologists.
 - 2.5.1. Disadvantages of Not Having an On-call Microbiologist.
 - 2.5.2. Advantages of Having an On-call Microbiologist.
 - 2.5.3. On-call Care without a Microbiologist.

Module 3. Systemic Febrile Syndrome. Antimicrobials:

- 3.1. Biomarkers in Sepsis
 - 3.1.1. Lactate.
 - 3.1.2. Procalcitonin.
 - 3.1.3. Proadrenomedullin.
 - 3.1.4. Combinations.
- 3.2. Initial Focus in Acute Fever Syndrome.
 - 3.2.1. Initial Management of a Patient with a Fever in the Emergency Department.
 - 3.2.2. Treatment.
 - 3.2.3. Special Categories.
 - 3.2.4. Fever of Unknown Origin
 - 3.2.5. Attitude and Destiny of the Patient.
- 3.3. Bacteremia, Sepsis and Septic Shock.
 - 3.3.1. Definitions According to Consensus Conferences.
 - 3.3.2. How to Identify a Patient with Sepsis
 - 3.3.3. Controversies and Limitations of the New Definitions.
 - 3.3.4. Managing Sepsis.
- 3.4. Antimicrobials:
 - 3.4.1. Concept: What is a Antimicrobial?
 - 3.4.2. Antibacterials.
 - 3.4.3. Pregnancy and Breastfeeding.
 - 3.4.4. Antifungal.



Module 4. Emergency Diagnostic and Therapeutic Management of Fever in Special Situations

- 4.1. Fever in Emergencies.
 - 4.1.1. General Concepts.
 - 4.1.2. Action Protocol.
 - 4.1.3. Patient Orientation.
- 4.2. Fever in an Elderly Patient.
 - 4.2.1. General Concepts
 - 4.2.2. Characteristics of the Specific Clinical Framework.
 - 4.2.3. Points to Remember.
- 4.3. Fever in a Hemodialysis Patient.
 - 4.3.1. Infections Related to Vascular Access in Hemodialysis.
 - 4.3.2. Other Considerations in the Infectious Pathology of a Patient on Dialysis.
- 4.4. Fever in the Patient with Intravascular Catheters.
 - 4.4.1. Clinical Manifestations
 - 4.4.2. Etiology.
 - 4.4.3. Diagnosis.
 - 4.4.4. Treatment.
 - 4.4.5. Prevention.
- 4.5. Patient with HIV Infection.
 - 4.5.1. Pulmonary Syndromes.
 - 4.5.2. Neurological syndromes.
 - 4.5.3. Other Fever Syndromes.
 - 4.5.4. Immune Reconstitution Syndrome.
- 4.6. Patient With Iatrogenic Immunosuppression.
 - 4.6.1. Etiology.
 - 4.6.2. Diagnostic Approach.
 - 4.6.3. Treatment.
- 4.7. Patient with Onco-hematologic Pathology.
 - 4.7.1. Diagnosis and Therapeutic Management of an Onco-hematologic Patient with a Fever.
- 4.8. Transplant Recipient of a Solid Organ.
 - 4.8.1. Infections in the First Month Post-Transplant.
 - 4.8.2. Infections Between the First and Sixth Month Post-Transplant.
 - 4.8.3. Infections After the Sixth Month Post-Transplant
 - 4.8.4. Diagnostic Strategy
 - 4.8.5. Empirical Treatment.
- 4.9. Patient Who Has Recently Undergone Surgery.
 - 4.9.1. Infection of Surgical Wounds. Current Management.
 - 4.9.2. Other Infections in a Patient Who Has Recently Undergone Surgery.
- 4.10. Pregnant Patient.
 - 4.10.1. Special Characteristics of a Pregnant Woman.
 - 4.10.2. Diagnostic Orientation in the Emergency Department.
 - 4.10.3. Treatment and Management in Special Situations.
 - 4.10.4. 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.



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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"

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. Gervas, 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.

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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.
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.

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.



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.





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.

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.



07 Certificate

The **Postgraduate Diploma in Fever Management in the Emergency Room** guarantees you, in addition to the most accurate and up-to-date training, access to a Postgraduate Diploma issued by **TECH Technological University**.



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Successfully complete this training and receive your university degree without travel or laborious paperwork”

This **Postgraduate Diploma in Fever Management in the Emergency Room** contains the most complete and up-to-date scientific program on the market.

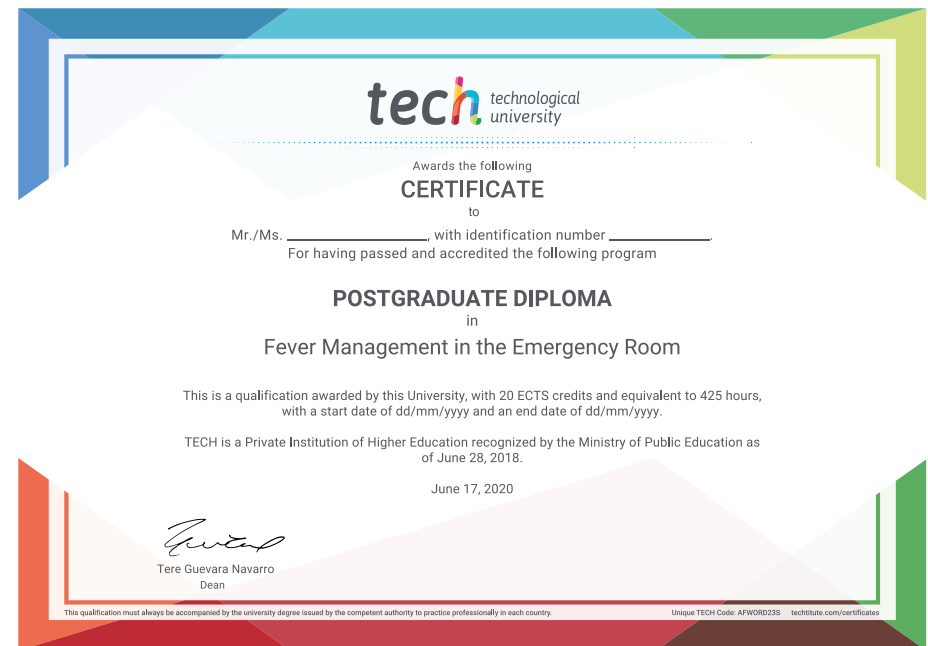
After the student has passed the evaluations, they will receive by mail with acknowledgement of receipt their corresponding **Postgraduate Diploma** issued by **TECH Technological University**.

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

Title: **Postgraduate Diploma in Fever Management in the Emergency Room**

ECTS: 17

Official Number of Hours: 425



health future confidence people education information tutors guarantee accreditation teaching institutions technology learning community commitment personalized service innovation knowledge present quality online training development languages virtual classroom



Postgraduate Diploma
Fever Management
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Course Modality: Online

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Certificate: TECH Technological University

17 ECTS Credits

Teaching Hours: 425 hours.

Postgraduate Diploma

Postgraduate Diploma in Fever Management in the Emergency Room

