



# Postgraduate Diploma

# **Emerging Viruses**

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-emerging-viruses

# Index

 $\begin{array}{c|c} \hline 01 & 02 \\ \hline & Dijectives \\ \hline 03 & 04 & 05 \\ \hline Course Management & Structure and Content & Methodology \\ \hline & p. 12 & p. 18 & p. 22 \\ \hline \end{array}$ 

06

Certificate

p. 30





## tech 6 Introduction

During the course of this Postgraduate Diploma, students will have the opportunity to acquire the basic knowledge required to face the situations that arise around patients suspected of having contracted a tropical disease while traveling. During the course of this Postgraduate Diploma the student will have the opportunity to acquire the basic knowledge necessary to face the situations that arise around the patient with suspicion of having contracted a new or emerging viral disease. Thus, during the development of the course contents, the student will learn to integrate the new techniques and the most advanced procedures in this discipline into his work.

The differential contribution of this Postgraduate Diploma is the practical vision of the program. This approach has been implemented in all the teaching developments that the student will use during their training. Our goal: To enable you to start applying what you have learned immediately in your work.

TECH's teaching staff is composed of medical professionals, practicing specialists. In this way we ensure that we offer a quality academic update. A multidisciplinary team of professors with training and experience in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will bring their practical knowledge derived from their own experience to the course: one of the differential qualities of this Postgraduate Diploma.

This mastery of the subject matter is complemented by the effectiveness of the methodological design of this program, developed by a multidisciplinary team of e-learning experts who integrate the latest advances in educational technology. In this way, the student will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your training.

This **Postgraduate Diploma in Emerging Viruses** contains the most complete and upto-date program on the market. The most important features of the program include:

- The development of case studies presented by experts in emerging viruses.
- 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.
- Practical exercises where the self-assessment process can be carried out to improve learning.
- · Special emphasis on innovative 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.



Master the diagnosis and treatment of emerging viruses with this high-quality program"



If you want to be trained in emerging viruses, without losing out on the maximum rigor and quality, then this Postgraduate Diploma is for you"

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 training programmed to train in real situations.

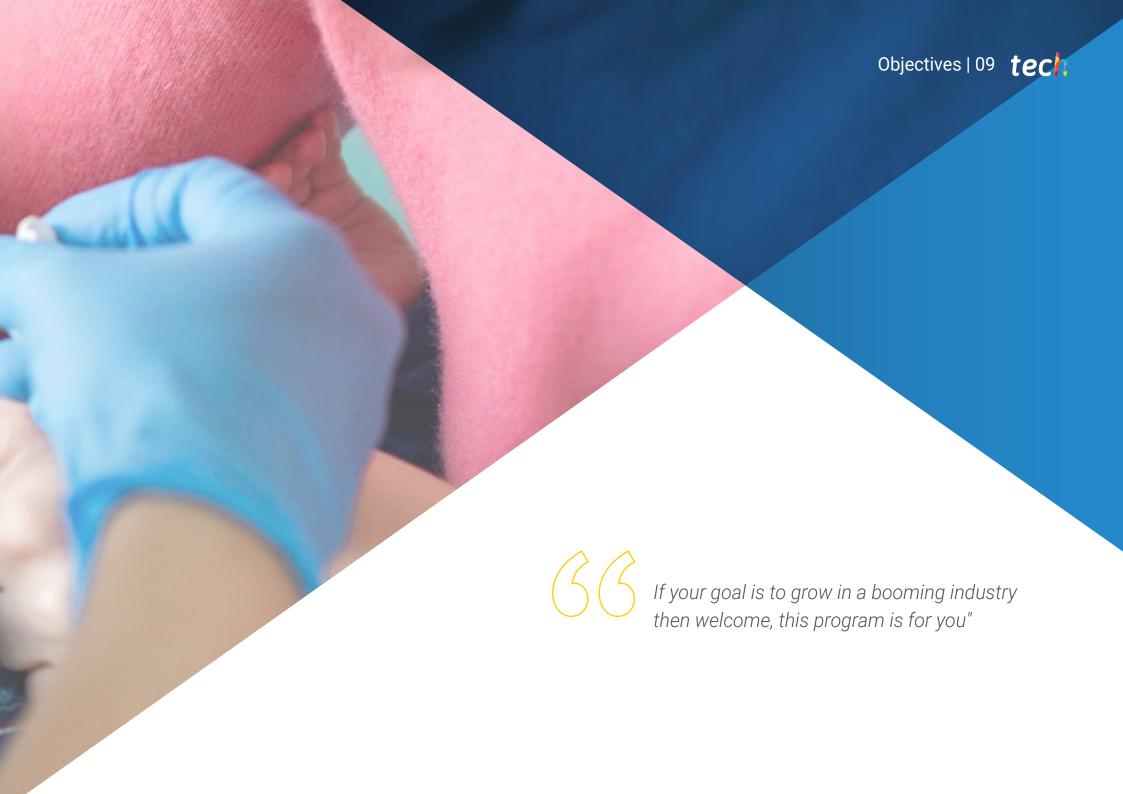
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and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

You will learn from an excellent teaching staff that will lay the foundations for your professional growth.

Become a better doctor; able to fight emerging viral diseases more efficiently.







# tech 10 | Objectives



## **General Objective**

• Guarantee professional improvement, through up-to-date and in-depth knowledge of the best scientific evidence for the prevention, diagnosis, and treatment of tropical diseases and international health with a multidisciplinary and integrative approach that facilitates the control of these pathologies.



You will achieve your goals thanks to our tools and you will be accompanied along the way by leading professionals"





### **Specific Objectives**

### **Module 1. Tropical Medicine and International Health**

- Provide students with advanced, in-depth, updated, and multidisciplinary information that allows them to comprehensively approach the health-infectious disease process in tropical countries.
- Develop skills to implement prophylactic plans for the prevention of tropical diseases
- Emphasize the future challenges in tropical medicine in reducing morbidity and mortality from tropical diseases and in international health.
- Address the important role of microbiology and the infectologist in the control of tropical diseases.

### **Module 2. Tropical Viral Diseases I**

- Assess and interpret the epidemiological, climatological, social, cultural, and sanitary characteristics and conditions of tropical countries that are conducive to the emergence and development of infectious diseases and their spread to other regions.
- Support the importance in the control of viral hemorrhagic diseases and the detailed study of the most frequent and deadly diseases for the reduction of global morbimortality in tropical countries.

### **Module 3. Tropical Viral Diseases II**

- Highlight the role of immunity in the most frequent central nervous system infections in the tropics and their complications.
- Explain the pathophysiological and pathogenic interrelationships between tuberculosis co-infection and HIV/AIDS infection in the tropics.
- Describe the clinical, diagnostic, and therapeutic characteristics of sexually transmitted infections in the tropics.







# tech 14 | Course Management

### Management



### Dr. Díaz Menéndez, Marta

- Specialist in Internal Medicine in the Department of Infectious/Tropical Medicine at Carlos III-La Paz Hospital.
- · Degree in Medicine and Surgery from the University of Alcalá de Henares
- · Specialty in Internal Medicine at La Paz University Hospital, Madrid.
- Doctorate in Medicine from the Autonomous University Madrid
- Teaching placements in Equatorial Guinea and Ethiopia as complementary training in tropical medicine.
- · Master's Degree in HIV Infection at the Rey Juan Carlos University
- Diploma in Nursing from the Autonomous University of Madrid.

#### **Professors**

### Dra. De Miguel Buckley, Rosa

- F.E.A. Internal Medicine- Infectious Diseases Unit/ HIV Unit/Tropical and Travel Medicine Unit. La Paz University Hospital (Madrid)
- Degree in Medicine, University of Seville
- Medical Elective in the Digestive Service, Hepatology Section, at Cork University Hospital
- Professional Exchange of the International Federation of Medical Students' Associations, Cardiology Department, en The Medical University of Bialystok Clinical Hospital
- Collaborator in Health Research Fund (FIS) projects.
- Collaborating researcher in clinical trials TANGO, SALSA (multicenter, simplification of antiretroviral treatment), Hospital registry of patients affected by bacterial resistance (SEIMC).

### Dr. Arsuaga Vicente, Marta

- F.E.A. Tropical Medicine and Travel Medicine Unit at La Paz University Hospital
- \* Degree in Medicine and Surgery from the University of Alcalá de Henares.
- Doctorate in Medicine from the Autonomous University Madrid
- \* Specialist in Internal Medicine from the Autonomous University Madrid
- Master's Degree in Tropical Medicine and International Health from the AUM
- Expert in Emerging Viruses from UAN

### Dr. Untoria Tabares, Yeray

- \* Resident Intern, Internal Medicine La Paz University Hospital Madrid
- Degree in Medicine from the Complutense University of Madrid.
- \* Master's Degree in Clinical Medicine from the Camilo José Cela University
- Master's Degree in Infectious Diseases and Antimicrobial Treatment from CEU Cardenal Herrera University.
- Postgraduate Diploma in Microbiological Diagnosis, Antimicrobial Treatment and Research in Infectious Pathology from CEU Cardenal Herrera University
- Postgraduate Diploma in Community and Nosocomial Infections from CEU Cardenal Herrera University
- Postgraduate Diploma in Chronic Infectious Diseases and Imported Infections from CEU Cardenal Herrera University

### Dr. Trigo Esteban, Elena

- Physician in the Department of Tropical and Traveler's Diseases at the Carlos III Hospital La Paz.
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Master's Degree in Tropical and Health Medicine from the Autonomous University of Madrid
- Degree in Emerging Viruses from the Autonomous University of Madrid.
- Course in Tropical and Infectious Diseases by the Oswaldo Cruz Foundation.
   Evandro Chagas Clinical Research Institute

# tech 16 | Course Management

### **Falces Romero, Iker**

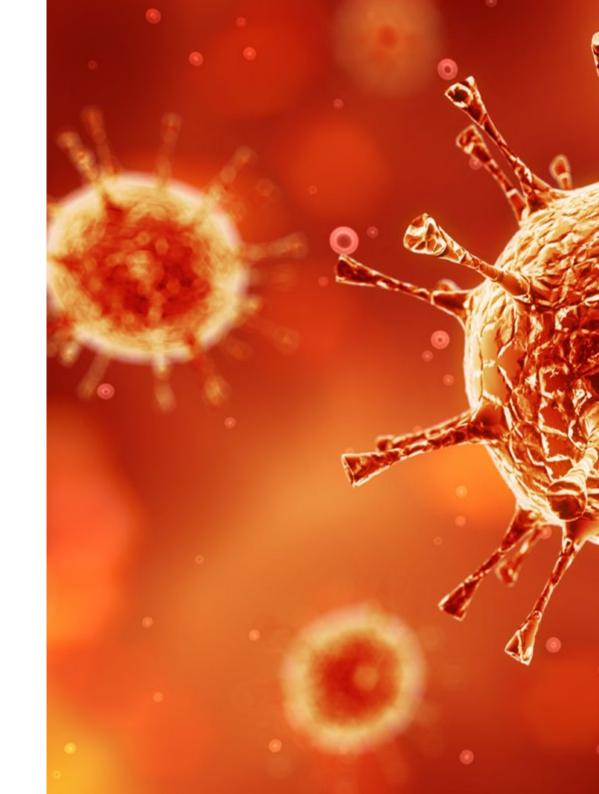
- Specialist in the Microbiology and Parasitology Department at La Paz University Hospital.
- Degree in Pharmacy from the University of Salamanca
- Master in Tropical Diseases from the University of Salamanca
- Professor of Special Microbiology on the Degree in Medicine at the Autonomous University of Madrid.

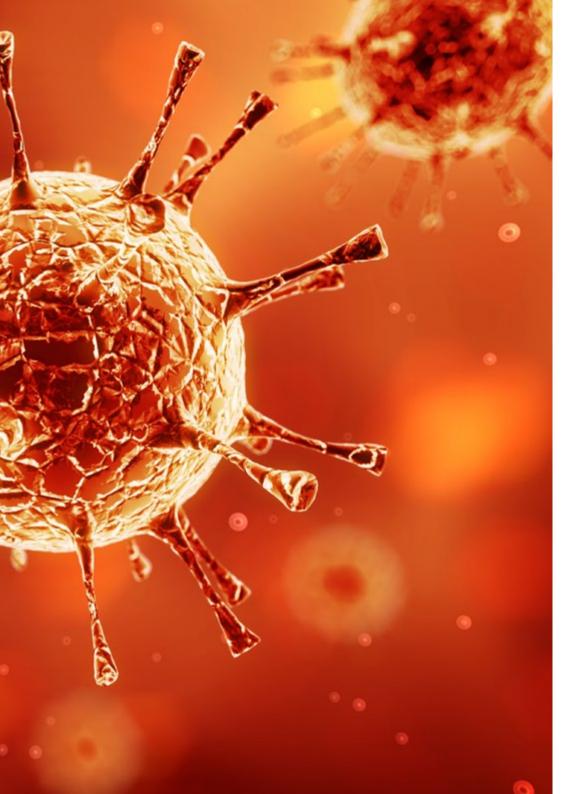
### De la Calle Prieto, Fernando

- Physician in the Tropical and Travel Medicine Unit of the Carlos III-La Paz Hospital
- Collaborating physician in the Department of Internal Medicine, Faculty of Medicine, Complutense University of Madrid.
- Degree in Medicine and Surgery from the University of Alcalá de Henares
- Master's Degree in Tropical Medicine and International Health from the Autonomous University of Madrid

### Dr. Arribas López, José Ramón

- Head of the Infectious Diseases Department at La Paz University Hospital.
- Coordinator of the High-Level Isolation Unit La Paz Carlos III Hospital
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Doctorate in Medicine from the Autonomous University Madrid





## Course Management | 17 tech

### Dr. Marcelo Calvo, Cristina

- F.E.A. of Internal Medicine at La Paz University Hospital
- \* Degree in Medicine and Surgery from the University of Alcalá.
- Master's Degree in Infectious Diseases and Microbiological Diagnosis from CEU Cardenal Herrera University.
- Master's Degree in Integration and Clinical Problem Solving in Medicine from the University of Alcalá, Spain.
- Expert in community and nosocomial infections from the CEU Cardenal Herrera University
- Postgraduate Diploma in chronic infectious pathologies and imported infections from CEU Cardenal Herrera University

#### Dr. Díaz Pollán, Beatriz

- Specialist in the area of Infectious Diseases at La Paz University Hospital.
- Degree in Medicine and Surgery from the Autonomous University of Madrid.
- Master's Degree in Infectious Diseases and Antimicrobial Treatment from CEU Cardenal Herrera University.
- Postgraduate Diploma in community and nosocomial infections from the CEU Cardenal Herrera University
- Postgraduate Diploma in Microbiological Diagnosis, Antimicrobial Treatment and Research in Infectious Pathology from CEU Cardenal Herrera University
- Postgraduate Diploma in chronic infectious pathologies and imported infections from CEU Cardenal Herrera University





## tech 20 | Structure and Content

### Module 1. Tropical Diseases and International Health

- 1.1. Tropical Medicine Today
- 1.2. OneHealth: Importance and Impact on Tropical Diseases
- 1.3. Conditioning Factors in Tropical Diseases
- 1.4. Emerging, Re-Emerging, and Imported Diseases: Concept and Implications
- 1.5. Epidemiological Strategies for Tropical Disease Control
- 1.6. Vector Control: Concept and Implications
- 1.7. Global Programs for the Prevention, Diagnosis, and Treatment of Tropical Diseases
- 1.8. Epidemiological Surveillance of Tropical Diseases. Information Sources
- 1.9. International Health Determinants. Health Indicators.
- 1.10. The Application of the Epidemiological Method in the Study of Tropical Diseases.

### Module 2. Tropical Viral Diseases I

- 2.1. Vector-Borne Viral Infections and their Global Spread.
- 2.2. Hemorrhagic Fevers I: Ebola and Marburg Virus Disease
- 2.3. Hemorrhagic Fevers II: Lassa Disease.
- 2.4. Hemorrhagic Fevers III: Crimean-Congo Hemorrhagic Fever
- 2.5. Dengue Virus Disease
- 2.6. Zika Virus Disease
- 2.7. Chikungunya Virus Disease and Other Viral Diseases with Joint Involvement
- 2.8. Yellow Fever.
- 2.9. Rift Valley Fever, Japanese E, West Nile
- 2.10. Nipah and Henipah Virus





## Structure and Content | 21 tech

### Module 3. Tropical Viral Diseases II

- 3.1. Monkeypox and Other Exanthematous Viral Diseases
- 3.2. Coronavirus Infections.
- 3.3. Hantavirus Infections
- 3.4. HIV and other Retroviruses in the Tropics
- 3.5. Rabies Virus Disease
- 3.6. Poliomyelitis and Other Polioviruses
- 3.7. Viral Hepatitis
- 3.8. Other Emerging Viruses and Disease X
- 3.9. Prevention of Viral Diseases: General Measures and Available Vaccines
- 3.10. Pharmacological Treatment of Tropical Viral Diseases







# tech 24 | 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.



### Methodology | 27 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.

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**

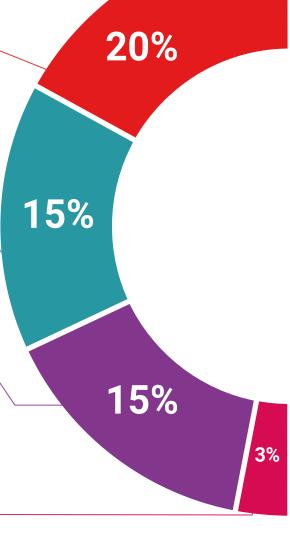
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.

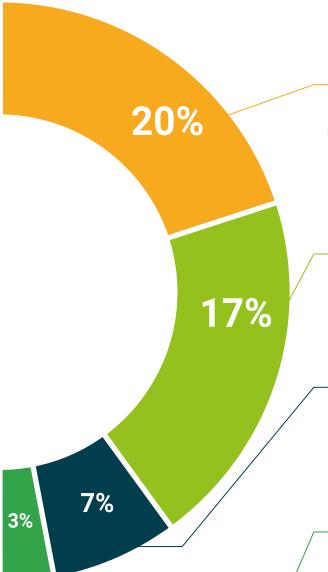
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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.





#### **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 32 | Certificate

This **Postgraduate Diploma in Emerging Viruses** contains the most complete and upto-date program on the market.

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

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

Title: Postgraduate Diploma in Emerging Viruses

**ECTS: 18** 

Official Number of Hours: 450 hours.



<sup>\*</sup>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 Diploma **Emerging Viruses**

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

