



# Postgraduate Certificate Parasitic diseases Transmitted by Vectors

Course Modality: Online Duration: 6 weeks

Certificate: TECH Technological University

**6 ECTS Credits** 

Teaching Hours: 150 hours.

Website: www.techtitute.com/medicine/postgraduate-certificate/parasitic-diseases-transmitted-vectors

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## 01 Introduction

Vector-borne diseases are human diseases caused by bacteria, parasites or viruses that are transmitted by living organisms. These parasitic diseases are more frequent in tropical and subtropical areas and in places with poor access to drinking water and sanitation where the lack of sanitation provides a breeding ground for bacteria, parasites and the spread of viruses. With the increased mobility of the population to exotic destinations or as a result of globalization, many of these pathologies have been imported. With this Postgraduate Certificate program, the medical professional will update their knowledge on the subject with the best experts who have developed an up-to-date and quality syllabus.



## tech 06 | Presentation

Vector-borne parasitic diseases are human diseases caused by bacteria, parasites or viruses that are transmitted by living organisms, mostly arising from contact between animals and humans. These vectors can transmit infectious pathogens between people, or from animals to people. Many of these vectors are hematophagous insects that ingest the pathogenic microorganisms along with the blood of an infected carrier (person or animal) and subsequently transmit them to a new carrier. Often, once the vector is already infectious, it can transmit the pathogen for the rest of its life with each subsequent bite or ingestion of blood.

This type of pathology is more frequent in tropical and subtropical areas and in places with problems of access to drinking water and sanitation where the lack of sanitation provides a breeding ground for bacteria, parasites and the spread of viruses. For example, more than 700,000 deaths are recorded each year from diseases such as malaria, dengue fever, schistosomiasis, human African trypanosomiasis, leishmaniasis, Chagas disease and onchocerciasis.

The fastest growing disease of this type in the world is dengue fever, the incidence of which has increased 30-fold in the last 50 years. Therefore, its diagnosis is key, as well as the activation of control and prevention protocols so that it does not proliferate, since it can have fatal consequences at pandemic levels.

Therefore, a specialization such as this Postgraduate Certificate on Parasitic Diseases Transmitted by Vectors is necessary to focus on research and the development of responses to prevent contagion. Thus, the student who attends this program will acquire the knowledge, protocols and skills necessary for the detection, diagnosis and treatment of this type of diseases.

In addition, it is a 100% online program that provides the student with the ease of being able to study it comfortably, wherever and whenever he/she wants. You will only need a device with internet access to move one step further in your academic career. A modality according to the current times with all the guarantees to position the professional in a booming sector.

This **Postgraduate Certificate in Parasitic Diseases Transmitted by Vectors** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- The latest technology in online teaching software
- A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- Practical cases presented by practising experts
- State-of-the-art interactive video systems.
- Teaching supported by telepractice
- Continuous updating and recycling systems
- Autonomous learning: full compatibility with other occupations
- Practical exercises for self-evaluation and learning verification
- Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- Communication with the teacher and individual reflection work
- Availability of content from any fixed or portable device with
- internet connection
- Supplementary documentation databases are permanently available, even after the Postgraduate Certificate



Thanks to this complete program you will contribute to the research and control of parasitic diseases, providing innovative solutions to the problem of their transmission"



Specialize with TECH with this Postgraduate Certificate in Parasitic Diseases Transmitted by Vectors and move towards excellence with the best professionals"

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 to explain the clinical, diagnostic, and therapeutic elements of neglected tropical diseases.

You will highlight in your daily work the role of vector control and the clinical epidemiological study of arboviruses.







## 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 are one step away from specializing in a medical field of the future. Do it with TECH's guarantee of excellence"





## Objectives | 11 tech



## Specific Objectives

- Explain the clinical, diagnostic, and therapeutic elements of neglected tropical diseases.
- Highlight the role of vector control and the clinical epidemiological study of arboviruses





## 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.
- Specialist Diploma in Microbiological Diagnosis, Antimicrobial Treatment and Research in Infectious Pathology from CEU Cardenal Herrera University
- Specialist Diploma in Community and Nosocomial Infections from CEU Cardenal Herrera University
- Specialist 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
- Specialist 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.
- Specialist Diploma in community and nosocomial infections from the CEU Cardenal Herrera University
- Specialist Diploma in Microbiological Diagnosis, Antimicrobial Treatment and Research in Infectious Pathology from CEU Cardenal Herrera University
- Specialist Diploma in chronic infectious pathologies and imported infections from CEU Cardenal Herrera University

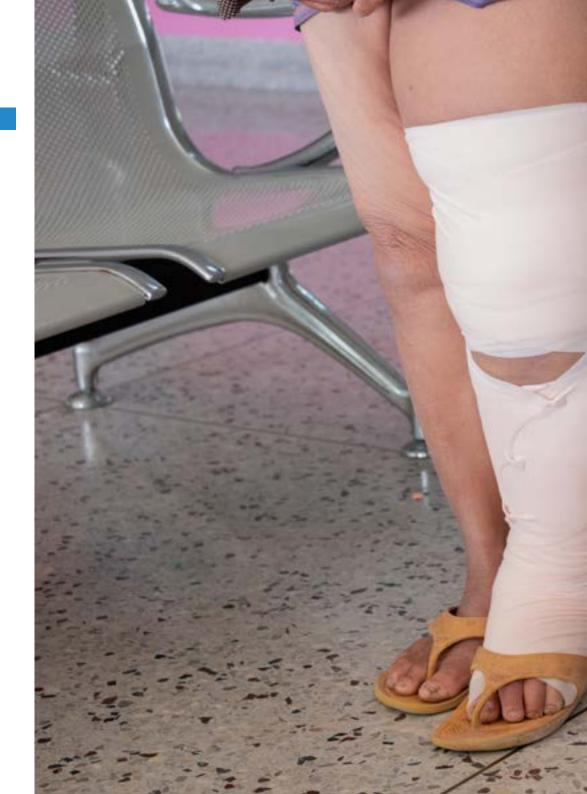




## tech 20 | Structure and Content

#### Module 1. Parasitic Diseases Transmitted by Vectors

- 1.1. Malaria
- 1.2. Babesiosis.
- 1.3. Leishmaniasis
- 1.4. American Trypanosomiasis: Chagas Disease
- 1.5. African Trypanosomiasis: Sleeping Sickness
- 1.6. Loasis
- 1.7. Onchocerciasis
- 1.8. Mansonellosis and Lymphatic Filariasis
- 1.9. Miscellaneous I: Skin Diseases: Pediculosis, Scabies, and Myiasis
- 1.10. Miscellaneous II: Bites and Stings









You will delve into the most common vector-borne parasitic diseases, such as malaria or Chagas disease."





## 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.
- 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**

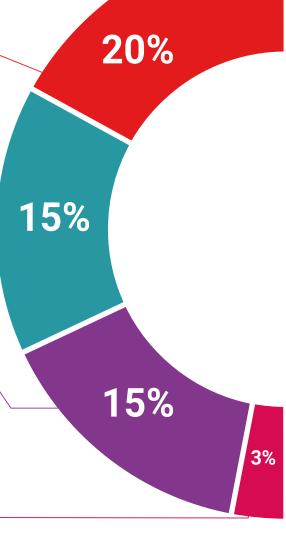
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.

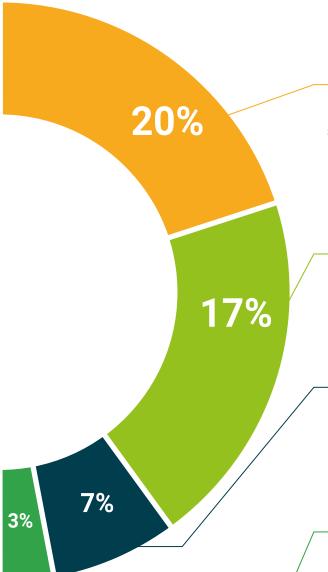
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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 Certificate Course on Parasitic Diseases Transmitted by Vectors contains the most complete and up-to-date scientific program on the market.

After the student has passed the evaluations, he/she will receive by mail with acknowledgment of receipt his/her corresponding Postgraduate Certificate issued by **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 from career evaluation committees.

Title: Postgraduate Certificate in Parasitic Diseases Transmitted by Vectors ECTS: 6

Official Number of Hours: 150



This is a qualification awarded by this University, with 6 ECTS credits and equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

technological university



## Postgraduate Certificate Microbiology, Genetics And Immunology of Tropical Diseases

Course Modality: Online Duration: 6 weeks

Certificate: TECH Technological University

**6 ECTS Credits** 

Teaching Hours: 150 hours.

