



## Postgraduate Certificate

Mycobacterial Infections in Special Patients

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/mycobacterial-infections-special-patients

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# 01 Introduction

When a patient is infected by mycobacteria, it is not necessary to take into account only the epidemiological characteristics of this germ, but it is also necessary for the specialist to know in detail their condition combined with other pathologies, such as liver, cancer, respiratory, etc. Therefore, knowing in detail the advances that have occurred in the clinical management of these cases has become, more than an obligation, a necessity for all those doctors who seek to offer a service in accordance with the immediate current situation of the profession, aspects that you can work with this program. It is a 100% online program that includes all the news related to tuberculosis in special patients and with which the graduate will be able to catch up in just 6 weeks and in an exhaustive way.



## tech 06 | Introduction

Tuberculosis is an infection that, despite being more controlled than in the 20th century, continues to affect millions of people each year. The numerous studies that have been carried out to determine its epidemiology, as well as to create increasingly effective treatments, allow specialists to treat these patients with increasing rigor. However, special attention must be paid when it comes to people who also suffer from other pathologies, since in these cases mycobacteria can worsen the situation, which requires specialized treatment.

That is why TECH has developed the Diploma in Mycobacterial Infections in Special Patients, a complete and intensive program that will allow the specialist to get up to date on this subject through a 100% online degree designed by experts in Microbiology. Thanks to the exhaustiveness with which it has been designed, you will be able to delve into the specifications of tuberculosis in patients with conditions in the renal system, the liver, with cancer, the elderly, immunosuppressed or those who have undergone lung transplants, among other cases.

In addition, you will find additional material presented in different formats: detailed videos, images, research articles, and complementary readings that will help you contextualize the information and delve into those sections that you consider most relevant. In this way, you will be able to obtain personalized performance from this program, which, added to its accessibility and time flexibility, will allow you to catch up in a way that is perfectly reconciled with your professional and personal life.

This **Postgraduate Certificate in Mycobacterial Infections in Special Patients** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Medicine and Microbiology
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions for 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



A program designed by and for specialists who seek to update their knowledge in order to more effectively address patients with tuberculosis and other pathologies"



In the Virtual Classroom you will find detailed videos, research articles and complementary readings so that you can delve into the sections that you consider most relevant"

The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, prepared with the latest educational technology, will allow professionals situated and contextual learning, that is, a simulated environment that will provide immersive training programmed to train in real situations.

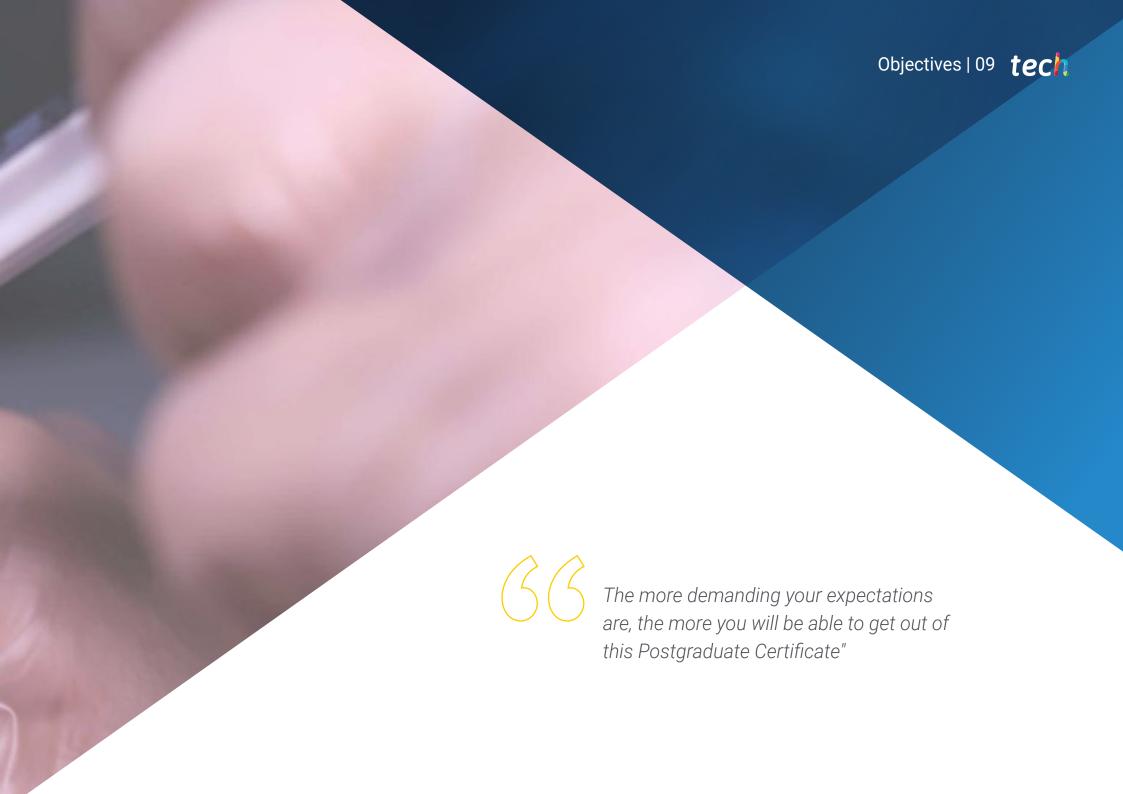
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

You will be able to delve into the scientific news of nephropathic patients and their clinical management when they have been infected by tuberculosis mycobacteria.

A 100% online program with which you can work on complex clinical pictures due to age and tuberculosis condition.







## tech 10 | Objectives



## **General Objectives**

- Develop updated and expanded knowledge in the specialist on the clinical management of patients with different pathologies infected, in addition, by mycobacteria
- Make available to the graduate the most innovative and effective material of the university environment that facilitates exhaustive and conscientious updating



If your objective is to know in detail the latest scientific advances in the clinical management of immunocompromised patients with latent tuberculosis, this program is perfect for you"





## Objectives | 11 tech



## **Specific Objectives**

- Become deeply familiar with the peculiarities of tuberculosis in different patients: nephropaths, hepatopaths, the elderly, patients treated with biologics, oncohaematological patients, lung transplant recipients and other patients with solid organ transplants
- Conduct an in-depth study of non-tuberculous mycobacterial infections in immunocompromised patients and patients with pulmonary pathology
- Know how to manage latent tuberculosis in immunosuppressed patients





## tech 14 | Course Management

#### Management



#### Dr. Sánchez Romero, María Isabel

- Area Specialist in the Microbiology Department of the Puerta de Hierro Majadahonda University Hospital, Madrid
- PhD in Medicine and Surgery from the University of Salamanca
- Medical Specialist in Clinical Microbiology and Parasitology
- Member of the Spanish Society of Infectious Diseases and Clinical Microbiology
- Technical Secretary of the Madrid Society of Clinical Microbiology

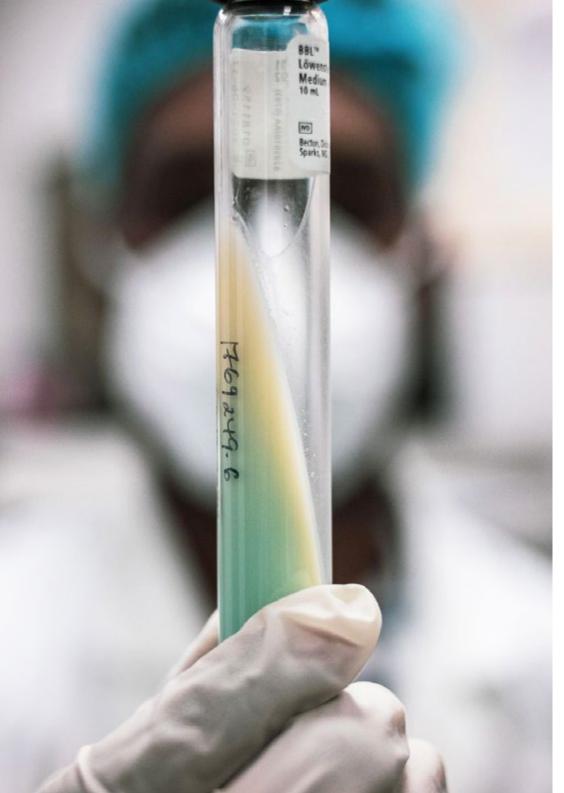
#### **Professors**

#### Dr. Gijón, Paloma

- \* Specialist in Clinical Microbiology and Infectious Diseases at the Gregorio Marañón Hospital
- Microbiology Resident Tutor at the Gregorio Marañon Hospital
- \* Specialist in Family and Community Medicine at the Ramón y Cajal Hospital
- Diploma in Health and International Cooperation from the Autonomous University of Madrid
- Degree in Medicine and Surgery from the Complutense University of Madrid

#### Dr. Alarcón Cavero, Teresa

- Biologist Specialist in Microbiology, Princesa University Hospital
- Head of Group 52 of the Research Institute of the La Princesa Hospital
- Degree in Biological Sciences with a major in Fundamental Biology from the Complutense University of Madrid
- \* Master's Degree in Medical Microbiology from the Complutense University of Madrid



## Course Management | 15 tech

#### Dr. Fernández Cruz, Ana

- Infectious Diseases Specialist at the Puerta de Hierro Majadahonda University Hospital
- Assistant Physician in the Infectious Diseases and Clinical Microbiology Department of the Gregorio Marañón General University Hospital
- \* Specialist in Internal Medicine in different health centers in Spain
- PhD in Medicine and Surgery from the Autonomous University of Madrid
- Degree in Medicine and Surgery from the Autonomous University of Madrid
- Master's Degree in Infectious Diseases and Clinical Microbiology, Complutense University of Madrid
- Master's Degree in Medical Management and Clinical Management by the UNED
- University expert in HIV infection and associated diseases by the Miguel Hernández University of Elche

#### Dr. Laporta Hernández, Rosalía

- Area Specialist in the Pulmonology Service in the Lung Transplant Unit Puerta de Hierro University Hospital
- \* Associate Professor, Autonomous University of Madrid
- Doctor of Medicine. Autonomous University of Madrid
- Degree in Medicine and Surgery. University of Salamanca
- Specialist in Pulmonology





## tech 18 | Structure and Content

#### Module 1. Mycobacterial Infections in Special Patients

- 1.1. Tuberculosis in Nephropathic Patients
- 1.2. Tuberculosis in Hepatopathic Patients
- 1.3. Tuberculosis in Elderly Patients
- 1.4. Tuberculosis in Patients Treated with Biologics
- 1.5. Tuberculosis in Oncohematologic Patients
- 1.6. Tuberculosis in Patients with Solid Organ Transplantation (Other Than Tx Pulm)
- 1.7. Tuberculosis in Patients with Pulmonary Pathology and Lung Transplantation
- 1.8. Infection by Non-Tuberculous Mycobacteria in Immunocompromised Patients
- 1.9. Non-Tuberculous Mycobacterial Infections in Patients with Pulmonary Pathology and Lung Transplantation
- 1.10. Managing Latent Tuberculosis in Immunocompromised Patients







A program that will allow you to update yourself exhaustively, comfortably, at your own pace and with the guarantee and endorsement of the largest Online School of Medicine in the world"





## tech 22 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will 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 power 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 the physician's professional 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 achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
- 2. Learning is solidly translated into 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.





#### Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This 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, a real revolution with respect to the mere study and analysis of cases.

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



## Methodology | 25 tech

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

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

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

## tech 26 | Methodology

This program offers the best educational material, prepared with professionals 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.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Surgical Techniques and Procedures on Video**

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

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

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts.

The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.









## tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Mycobacterial Infections in Special Patients** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Mycobacterial Infections in Special Patients

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Certificate in Mycobacterial Infections in Special Patients

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



tech global university



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