

# Postgraduate Certificate Non-Tuberculous Mycobacterial Infections



## Postgraduate Certificate Non-Tuberculous Mycobacterial Infections

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

Website: [www.techtitute.com/us/medicine/postgraduate-certificate/non-tuberculous-mycobacterial-infections](http://www.techtitute.com/us/medicine/postgraduate-certificate/non-tuberculous-mycobacterial-infections)

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# 01

# Introduction

Occasionally, patients come to the office who, after examination, are found to have an infection caused by non-tuberculous mycobacteria, usually located in soil or water. Although this type of germ does not usually cause complications in healthy adults, it can cause comorbidities in frail elderly patients or in immunocompromised patients. For this reason, the specialist must be up to date on the scientific evidence related to the diagnosis and treatment of infectious pathologies caused by these bacteria and their variants, in order to be able to offer the patient an even more specialized and higher quality service. This program includes all these aspects, and has been designed exclusively for all those physicians who want and need to update their knowledge through a 100% online degree.





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*The latency of nontuberculous mycobacterial infections is regular. Therefore, knowing the latest developments related to the diagnosis and treatment of their infections is a fundamental requirement for specialists"*

The treatment of non-tuberculous mycobacterial infections is usually optimal when performed by a specialist with experience in the area or when they have a broad and exhaustive knowledge of the scientific evidence. Hence the importance for the physician to have, at all times, academic facilities with which he/she can update his/her knowledge without having to neglect his/her professional duties, and through a degree that adapts to the complex and demanding requirements of the profession.

For that reason, TECH and its team of experts in Medicine and Microbiology have developed this comprehensive and intensive program in Non-Tuberculous Mycobacterial Infections. It is a modern and dynamic program that aims to serve as a guide to the graduate in updating their knowledge, through a comprehensive tour of the developments related to these germs. Will be able to delve into the current problems and the different Mycobacterium complexes, as well as their microbiological characteristics, their clinical picture and the most effective recommendations for their treatment.

For this, you will have the best theoretical, practical and additional content in the field, presented in a convenient and flexible 100% online format. This will allow you to organize the academic experience based on your own availability, since in addition to being able to access it from any device with an internet connection 24 hours a day, you will also be able to download and consult it offline.

This **Postgraduate Certificate in Non-Tuberculous Mycobacterias Infections** 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 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



*A program designed by experts in Medicine and Microbiology and adapted to the professional needs of specialists like you"*

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*The entire content will be available from the beginning of the Postgraduate Certificate and can be downloaded for offline consultation at any time”*

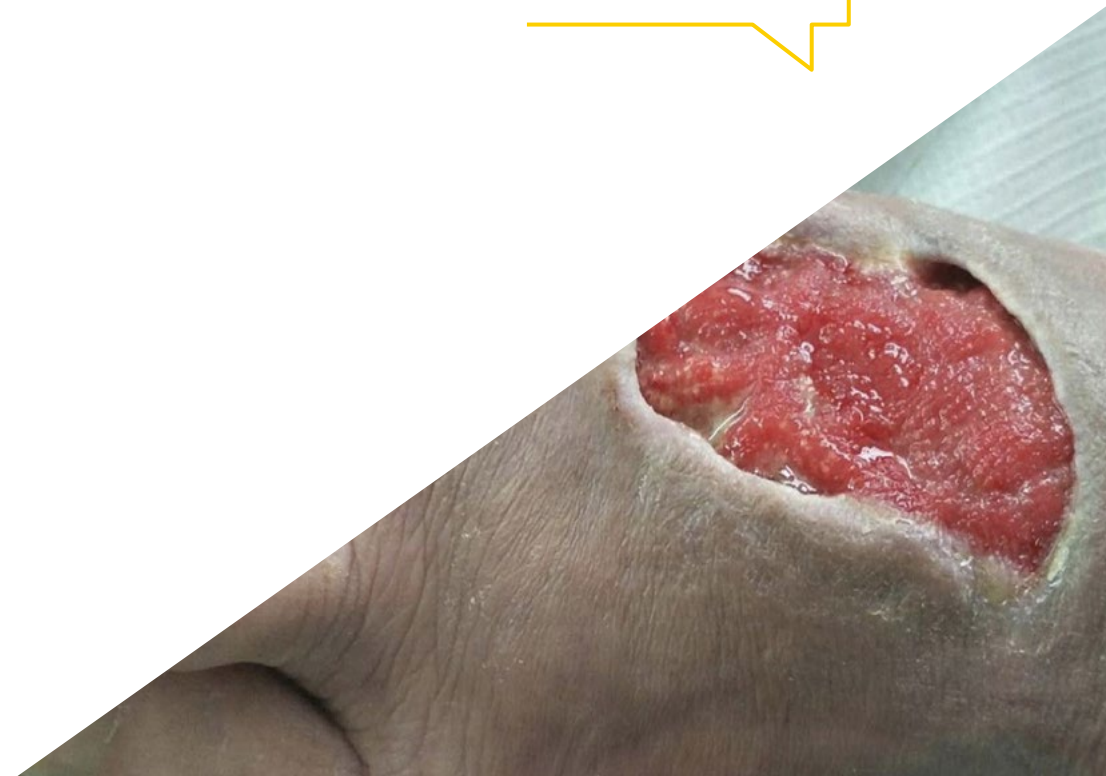
The program’s teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, 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 education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

*Access the Virtual Classroom from any device with internet connection, whether it is a tablet, cell phone or computer.*

*Delve into the evolution of infections caused by non-tuberculous mycobacteria, as well as the current problems.*



# 02

## Objectives

The objective of the Postgraduate Certificate is to provide the graduate with the most sophisticated academic tools that will allow him/her to be updated on everything related to non-tuberculous mycobacterial infections through a 100% online qualification. Therefore, TECH will provide you with all the facilities you need to achieve this goal and culminate this academic experience with a broad and updated knowledge about these germs, the diagnosis of their pathologies and the most innovative and effective treatments.





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*TECH's goal is for you to finish this degree satisfied with the academic experience and the results you have obtained from it"*



## General Objectives

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- ◆ Study in depth the most novel aspects of non-tuberculous mycobacterial infections
- ◆ Delve into the latest evidence of Microbiology related to the early diagnosis and treatment of this type of infectious pathologies



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





## Specific Objectives

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- ◆ Become familiar with the evolution and current problems of infections caused by non-tuberculous mycobacteria
- ◆ Learn the microbiological characteristics, clinical picture and treatment of infections caused by *M. avium* complex, *M. kansasii*, *M. ulcerans*, *M. genavense*, *M. haemophilum*, *M. marinum*, *M. scrofulaceum* and *M. goodnae*

03

# Course Management

Having a teaching team specialized in the area on which the degree is based is one of the priorities that TECH takes into account when designing and programming them. In this case, the graduate will have the support of a faculty of doctors specialized in Microbiology, with a wide and extensive work experience in the management of clinical cases of patients with infections caused by non-tuberculosis mycobacteria. In addition, they are active professionals who will bring to the program a current, dynamic and critical vision of the dynamic and critical view of the current situation.



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*You will have the support of the teaching staff to solve all the doubts that may arise during the course of the degree”*

## 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. García-Masedo Fernández, Sarela

- ◆ Pharmacist Specialist in Clinical Microbiology and Parasitology
- ◆ Area Specialist in the Microbiology Department of the Puerta de Hierro Majadahonda University Hospital
- ◆ Resident Intern Pharmacist at the Microbiology and Parasitology Laboratory of the Puerta de Hierro University Hospital
- ◆ Pharmacist at the Sexta Avenida Pharmacy
- ◆ PhD in Microbiology Autonomous University
- ◆ Degree in Pharmacy. Autonomous University
- ◆ Supervised internship at the University of Oporto at San Juan del Puerto Hospital
- ◆ Member of: Spanish Society of Clinical Microbiology and Infectious Diseases, Madrid College of Pharmacists



# 04

## Structure and Content

This 100% online degree includes not only the best theoretical and practical content based on immediate current events in the Microbiology sector, but also hours of additional material presented in different formats. Likewise, thanks to the detailed videos, dynamic summaries, images, research articles and complementary readings, the graduate will be able not only to contextualize the information developed throughout the syllabus, but also to deepen in each section as much as their wishes, obtaining results in accordance with their requirements and demands.





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*A novel way to update you on the microbiological characteristics of the different Mycobacterium complexes, their clinical picture and most effective treatments"*

## Module 1. Non-Tuberculous Mycobacterial Infections

- 1.1. Evolution
- 1.2. Current Problems
- 1.3. Mycobacterium Avium Complex
  - 1.3.1. Species included in the Complex
  - 1.3.2. Microbiological Characteristics
  - 1.3.3. Clinical Picture
  - 1.3.4. Treatment
- 1.4. Mycobacterium Kansasii
  - 1.4.1. Microbiological Characteristics
  - 1.4.2. Clinical Picture
  - 1.4.3. Treatment
- 1.5. Mycobacterium Ulcerans
  - 1.5.1. Microbiological Characteristics
  - 1.5.2. Clinical Picture
  - 1.5.3. Treatment
- 1.6. Mycobacterium Genavense
  - 1.6.1. Microbiological Characteristics
  - 1.6.2. Clinical Picture
  - 1.6.3. Treatment
- 1.7. Mycobacterium Haemophilum
  - 1.7.1. Microbiological Characteristics
  - 1.7.2. Clinical Picture
  - 1.7.3. Treatment





- 1.8. Mycobacterium Marinum
  - 1.8.1. Microbiological Characteristics
  - 1.8.2. Clinical Picture
  - 1.8.3. Treatment
- 1.9. Myco bacterium Scrofulaceum
  - 1.9.1. Microbiological Characteristics
  - 1.9.2. Clinical Picture
  - 1.9.3. Treatment
- 1.10. Mycobacterium Gordonae
  - 1.10.1. Microbiological Characteristics
  - 1.10.2. Clinical Picture
  - 1.10.3. Treatment

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*Don't think twice and enroll right now in a degree with which you will see your knowledge updated in less than 6 weeks”*

# 05 Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, 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 Relearning, 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

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.

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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 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.*





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.



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.



# 06 Certificate

The Postgraduate Certificate in Non-Tuberculous Mycobacterial Infections guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

This **Postgraduate Certificate in Non-Tuberculous Mycobacterias Infections** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

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 Non-Tuberculous Mycobacterial Infections**

Official N° of Hours: **150 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.

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



**Postgraduate Certificate**  
Non-Tuberculous  
Mycobacterial Infections

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

# Postgraduate Certificate

## Non-Tuberculous Mycobacterial Infections

