Postgraduate Diploma
Mycobacterial Infections in Special Population Groups

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Postgraduate Diploma
Mycobacterial Infections in Special Population Groups

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

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-mycrobacterial-infections-special-population-groups

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01

Introduction

Pediatric, hepatopathic, oncohematologic or solid organ transplanted patients are especially sensitive to infectious diseases and are likely to have an increased incidence of tuberculosis infections. This 100% online Postgraduate Diploma explores very serious health problems caused by the disease, mainly in certain population groups, as well as the latest studies that have advanced in the diagnosis and treatment guidelines, which often involve long periods of time. All this with simulations of real cases provided by a specialized teaching team so that students obtain updated knowledge applicable to their daily clinical practice.

Update all your knowledge on mycobacterial infections, especially in patients with lung transplantation and respiratory pathology"

The Postgraduate Diploma is aimed to medical professionals specialized in infectious diseases, who wish to renew their knowledge in infectious diseases focused on the care of particularly sensitive patients such as minors, the elderly or people with other diseases such as HIV.

Tuberculosis is an infection that occurs more frequently and more severely in people with immunodeficiencies than in people who have a competent immune system. The health professional who takes this theoretical-practical course will delve into the knowledge of the different clinical forms of infection and will delve into all aspects related to the diagnosis from the clinical history, the microbiological and radiological diagnosis and the differential diagnosis. Likewise, this degree will allow you to apply the latest treatments with great scientific support.

The problems of certain patients make it more than necessary for health professionals to constantly update their knowledge in order to be able to attend in the most efficient way to patients who, for the most part, require individualized treatments. This update will be possible thanks to the study plan designed by experts in the field, who provide an extensive library of multimedia resources with essential readings and video summaries of each topic. All this is available from day one so that students can access the syllabus at any time and from any device with Internet connection.

This **Postgraduate Diploma in Mycobacterial Infections in Special Population Groups** 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

Get to know in an exhaustive way the main individualized treatments applied to patients with special characteristics"

A 100% online teaching that will allow you to combine your personal responsibilities with the renewal of knowledge in infectious diseases"

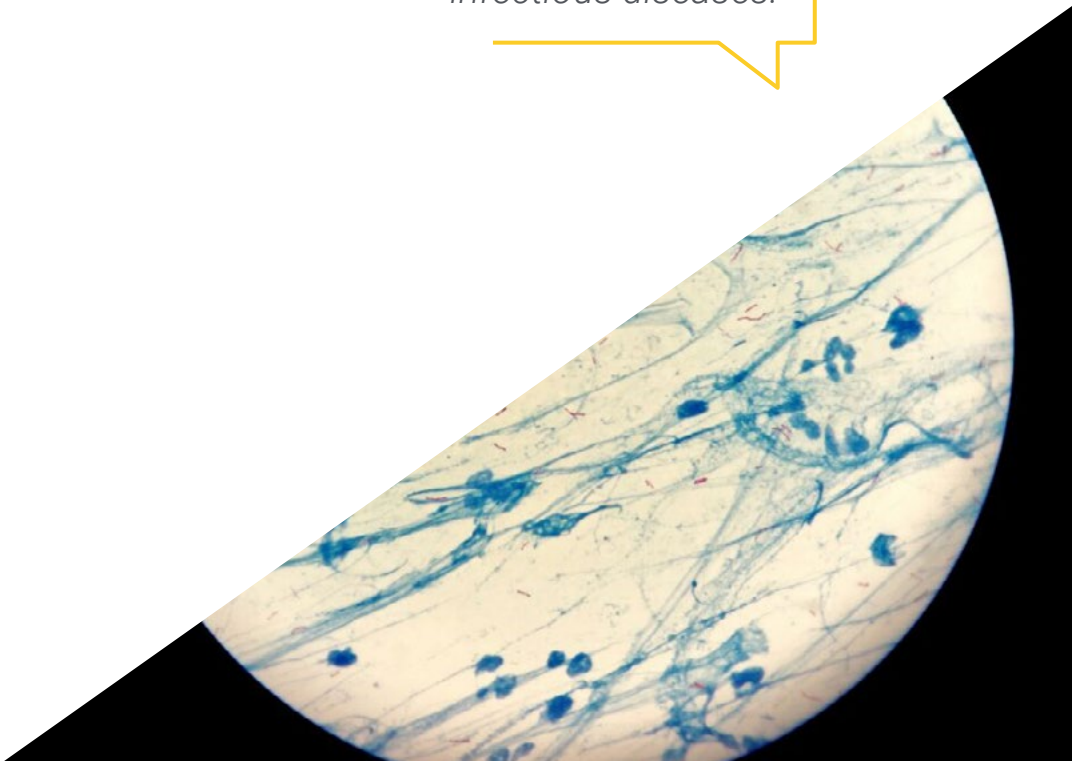
The multimedia content will allow you to delve into the peculiarities of the HIV-tuberculosis binomial from the epidemiological point of view.

It delves into the latest developments in treatment and monitoring of patients particularly sensitive to infectious diseases.

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.



02

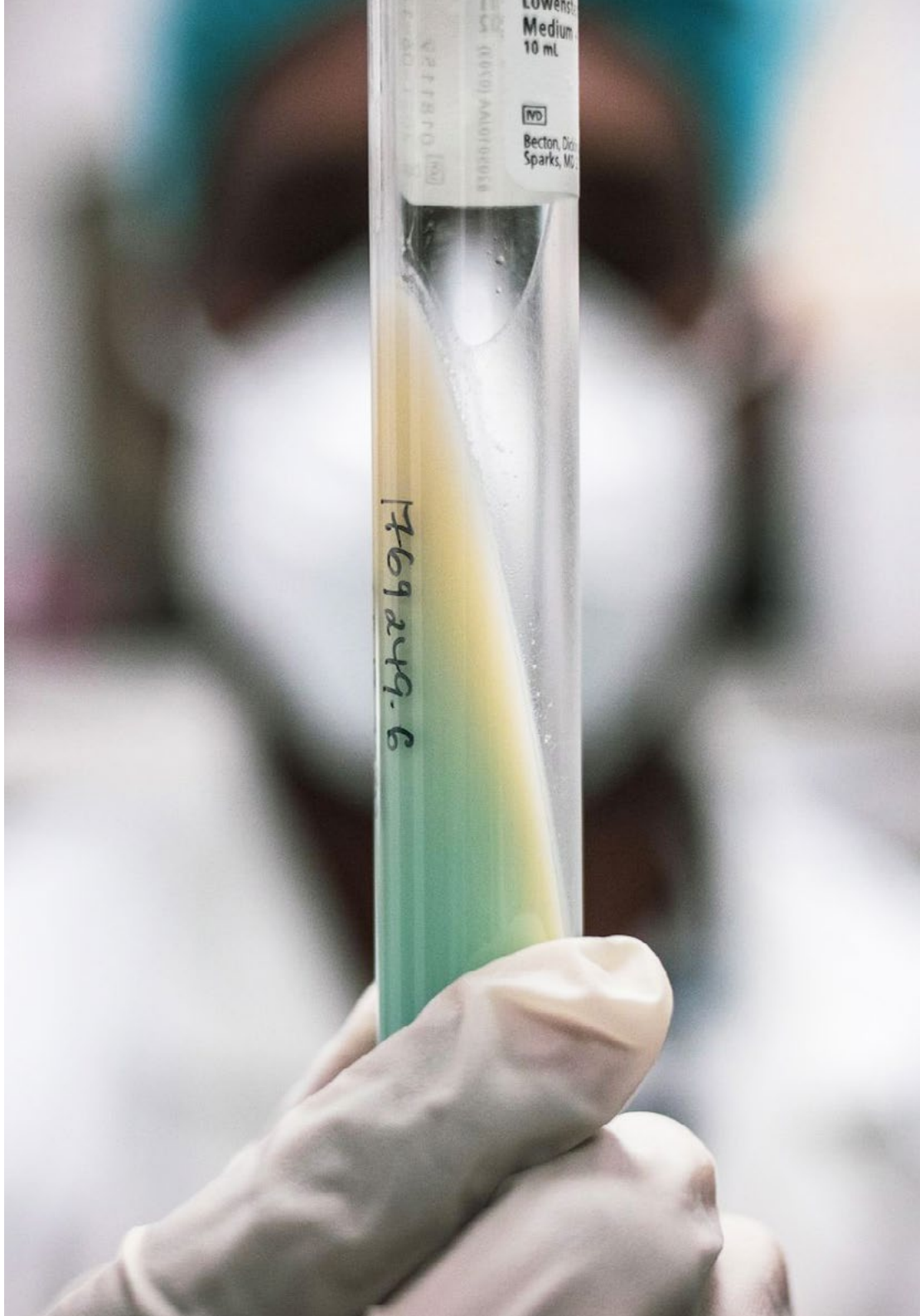
Objectives

The specialized teaching team has developed a syllabus that allows the health professional to learn about the latest scientific studies on the most effective treatments for patients in special population groups. Thus, at the end of the 6 months of this course, the students will have obtained a more updated knowledge of the treatments for tuberculosis and nontuberculous mycobacteria infections in HIV patients, minors or elderly people.

Delves into the management of latent tuberculosis in the immunocompromised, HIV-positive or pulmonary pathologies"

General Objectives

- In-depth study and update on infections caused by mycobacteria
- Have a broad body of knowledge of the available diagnostic methods and perform a detailed study of the drugs used in treatment, so as to optimize diagnoses and establish the most effective treatment guidelines with less adverse effects
- Comprehensively approach and manage both pulmonary and extrapulmonary clinical pictures caused by Mycobacterium tuberculosis complex, so as to know how to recognize, diagnose and treat this type of infections
- Define and recognize the clinical, microbiological, diagnostic and therapeutic characteristics of infections caused by an important number of non-tuberculous mycobacteria



Specific Objectives

Module 1. Mycobacterial Infections in Special Patients

- Become deeply familiar with the peculiarities of tuberculosis in different patients: nephropaths, hepatopaths, the elderly, patients treated with biologics, onco-haematological 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

Module 2. Mycobacterial Infections in VIH Patients

- Study the epidemiology of TB/HIV coinfection in depth
- Gain detailed knowledge of the manifestations of pulmonary and extrapulmonary tuberculosis in HIV-infected patients according to the number of LTCD4
- Delve into the available diagnostic methods and peculiarities to optimize diagnoses in this special type of patients
- Have broad knowledge of the treatment of tuberculosis and non-tuberculous mycobacterial infections in HIV patients
- Manage and treat latent tuberculosis infection in this type of patients

Module 3. Mycobacterial Infections in Pediatrics

- Become familiar with the evolution and current problems of childhood mycobacterial infections
- Delve into the different clinical forms of tuberculous disease in this type of patients
- Know all the available diagnostic methods that can be used, including clinical history and immunology, among others, which also helps make adequate differential diagnoses
- Delve into the treatment of tuberculosis disease in pediatric patients, including resistant tuberculosis and monitoring during treatment

The multimedia resource library and video summaries will facilitate the expansion of knowledge in a simple and practical way"

03

Course Management

In order to offer quality teaching, TECH incorporates in all its degrees a highly qualified teaching team with extensive professional experience in the area taught. Thus, the health professional will find in this online program a teaching team specialized in Microbiology and Infectious Diseases. Their work in hospitals of relevance in this field will be key for students to acquire an extremely practical and useful knowledge for their clinical practice.

TECH has selected a highly qualified teaching team to offer you quality online teaching"

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 by 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. 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

Dr. de la Fuente Moral, Sara

- Area Specialist in the Internal Medicine Department of the Santa Cristina University Hospital
- Area Specialist in the Emergency Department of the Puerta de Hierro University Hospital
- Area Specialist in the Internal Medicine Department of the Infanta Cristina University Hospital
- Researcher at the Biomedical Research Foundation of the Puerta de Hierro University Hospital
- Author and co-author of numerous scientific publications
- PhD from the Autonomous University of Madrid
- Proprietary Master's Degree in Infectious Diseases and Antimicrobial Treatment, CEU Cardenal Herrera University

Dr. García-Masedo Fernández, Sarela

- 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: Clinical Microbiology and Infectious Diseases Spanish Society, Madrid College of Pharmacists

Dr. Díaz de Santiago, Alberto

- Attending physician at the HIV Unit of the University Hospital Puerta de Hierro Majadahonda
- Attending physician for infectious diseases at the Ramón y Cajal Hospital
- Master's Degree in Human Immunodeficiency Virus Infection, Rey Juan Carlos I University
- Degree in Medicine and Surgery, Autonomous University of Madrid
- Doctor of Medicine, HIV-Hepatitis Coinfection. Autonomous University of Madrid

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. Lázaro Carrasco de la Fuente, María Teresa

- Specialist in Pulmonology and lung transplantation
- Area Specialist in the Pneumology Service. Lung Transplant Unit. Puerta de Hierro University Hospital
- Associate Professor, CC Health, Department of Medicine, Puerta de Hierro University Hospital Majadahonda
- Associate Professor, Autonomous University of Madrid
- Degree in Medicine and Surgery. University of Alcalá
- Doctor of Medicine. University of Alcalá

Dr. González Ojeda, Virginia

- Head of the Pediatrics Department at NISA Pardo de Aravaca Hospital
- Area Specialist in the Pneumology Service. Lung Transplant Unit. Puerta de Hierro University Hospital
- Associate Professor, CC Health, Department of Medicine, Puerta de Hierro University Hospital Majadahonda
- Associate Professor, Autonomous University of Madrid
- Degree in Medicine and Surgery. University of Alcalá
- Doctor of Medicine. University of Alcalá

Dr. García Díez, Julio

- Pharmacist specialized in Microbiology and Parasitology
- Area Specialist in Microbiology and Clinical Parasitology at the University Hospital of Fuenlabrada
- Area Specialist in Microbiology and Clinical Parasitology at the Severo Ochoa University Hospital
- Author of numerous publications for scientific congresses Professsional Master's Degree in Pharmacy from the Complutense University of Madrid.
- Master's Degree in Infectious Diseases and Antimicrobial Treatment in the Cardenal Herrera University
- Expert in Chronic Infectious Diseases and Imported Pathology by Cardenal Herrera University

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

04

Structure and Content

The syllabus of this Postgraduate Diploma consists of 3 modules that have been developed by specialists in the area of infectious diseases, including tuberculosis. The agenda, made up of videos explaining each point to be studied in depth, focuses on those special patients whose management requires even greater specialization; such is the case of minors, patients with pulmonary pathology or transplanted patients. The teaching staff will tutor the health care professional during the 450 teaching hours so that they can expand their knowledge in this area.

Access the latest advances in the treatment and diagnosis of tuberculosis in childhood and the elderly"

Module 1. Mycobacterial Infections in Special Patients

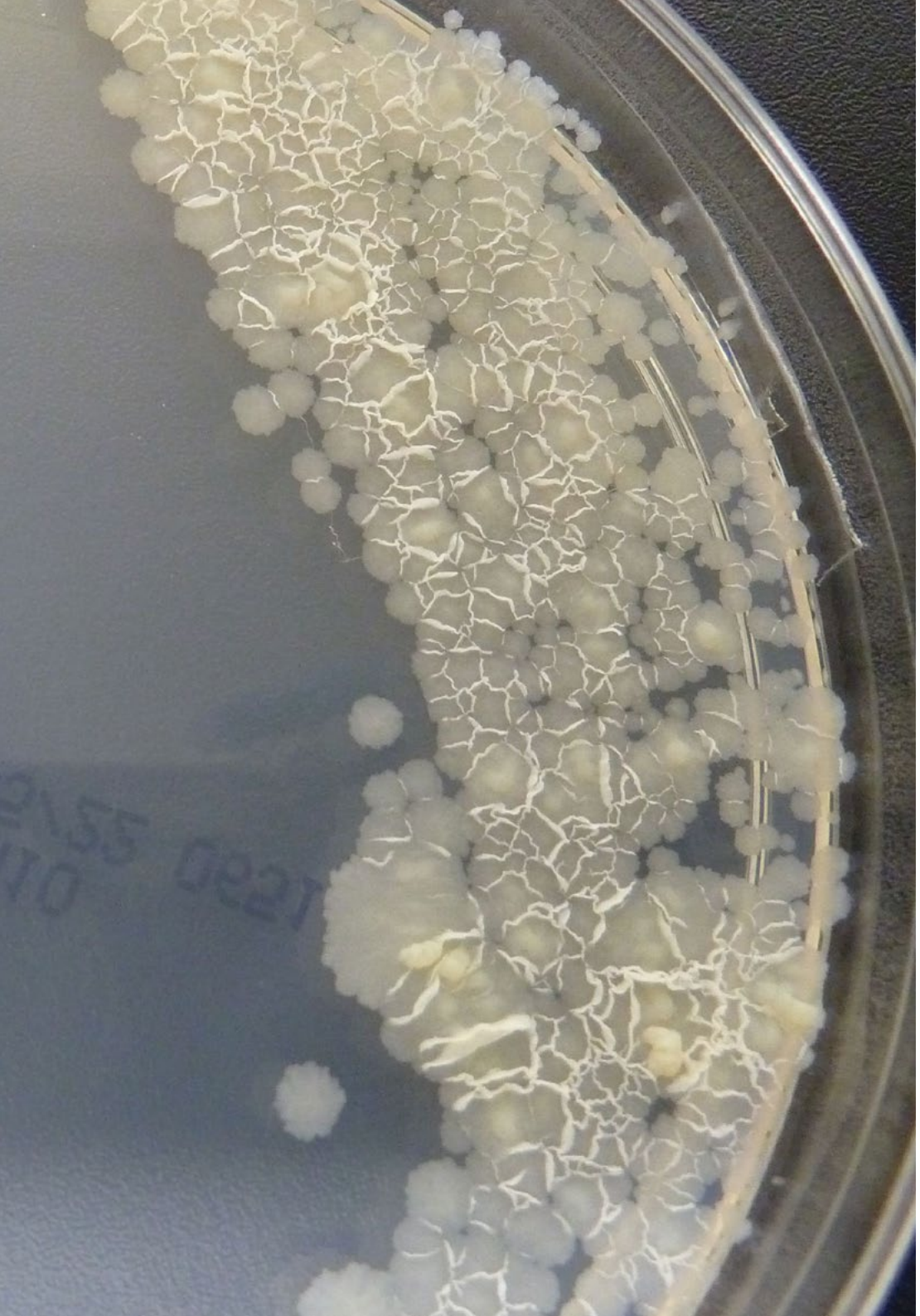
1.1. Tuberculosis in Nephropathic Patients
1.2. Tuberculosis in Hepatopathic Patients
1.3. Tuberculosis in Elderly Patients
1.4. Tuberculosis in Patients Treated with Biologics
1.5. Tuberculosis in Oncohematologic Patients
1.6. Tuberculosis in Patients with Solid Organ Transplantation (Other Than Tx *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

Module 2. Mycobacterial Infections in VIH Patients

2.1. Epidemiology of TB/HIV Co-Infection
2.2. Pulmonary Tuberculosis in HIV-Infected Patients with >200 LTCD4
2.3. Extrapulmonary Tuberculosis in HIV-Infected Patients with >200 LTCD4
2.4. Tuberculosis in HIV-Infected Patients with <200 LTCD4
2.5. Tuberculous Meningitis
2.6. Atypical Mycobacterial Infections in VIH Patients
2.7. Diagnosis of Mycobacterial Infection in HIV Patients
2.8. Treatment of Tuberculosis in HIV Patients
2.9. Treatment of Atypical Mycobacterium Infection in HIV Patients
2.10. Latent Tuberculosis Infection in HIV Patients Treatment

Module 3. Mycobacterial Infections in Pediatrics

3.1. Tuberculosis in Childhood
3.2. Current Problem of Tuberculosis Infection in Childhood
3.3. Clinical Presentation. Classifying Risk Status *in Mycobacterium Tuberculosis Complex* Infection
  3.3.1. Clinical Forms of Tuberculosis Disease
  3.3.2. Exposure to Tuberculosis without Infection
  3.3.3. Latent Tuberculosis Infection (LTBI)
  3.3.4. Tuberculous Disease
3.4. Diagnosis of Tuberculosis in Pediatrics
  3.4.1. Medical History
  3.4.2. Immunological Tests
  3.4.3. Direct Tests to Identify *Mycobacterium Tuberculosis Complex*
  3.4.4. X-Ray Tests
  3.4.5. Other Diagnostic Tests
  3.4.6. Differential Diagnosis
3.5. Treatment of Tuberculosis in Pediatrics
  3.5.1. Latent Tuberculosis Infection (LTBI)
  3.5.2. Tuberculous Disease
  3.5.3. Resistant Tuberculosis
  3.5.4. Monitoring During Treatment
  3.5.5. Other Therapeutic Measures
3.6. Prevention of Tuberculosis in Pediatrics
  3.6.1. Post-Exposure Prophylaxis
  3.6.2. Vaccines
3.7. Special Tuberculosis Situations in Pediatrics
  3.7.1. Immunosuppressed Patients
  3.7.2. History of BCG Vaccination
  3.7.3. Extrapulmonary Tuberculosis
  3.7.4. Perinatal Tuberculosis
3.8. Epidemiology of Atypical Mycobacterial Infections in Pediatrics
3.9. Diagnosis of Atypical Mycobacterial Infections in Pediatrics
3.10. Clinical Manifestations and Therapeutic Management of Atypical Mycobacterial Infections in Pediatrics
  3.10.1. Lymphadenitis
  3.10.2. Pulmonary Infections
  3.10.3. Disseminated disease



Expand your knowledge in the care and treatment of pediatric patients with atypical mycobacterial infections"

05

Methodology

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

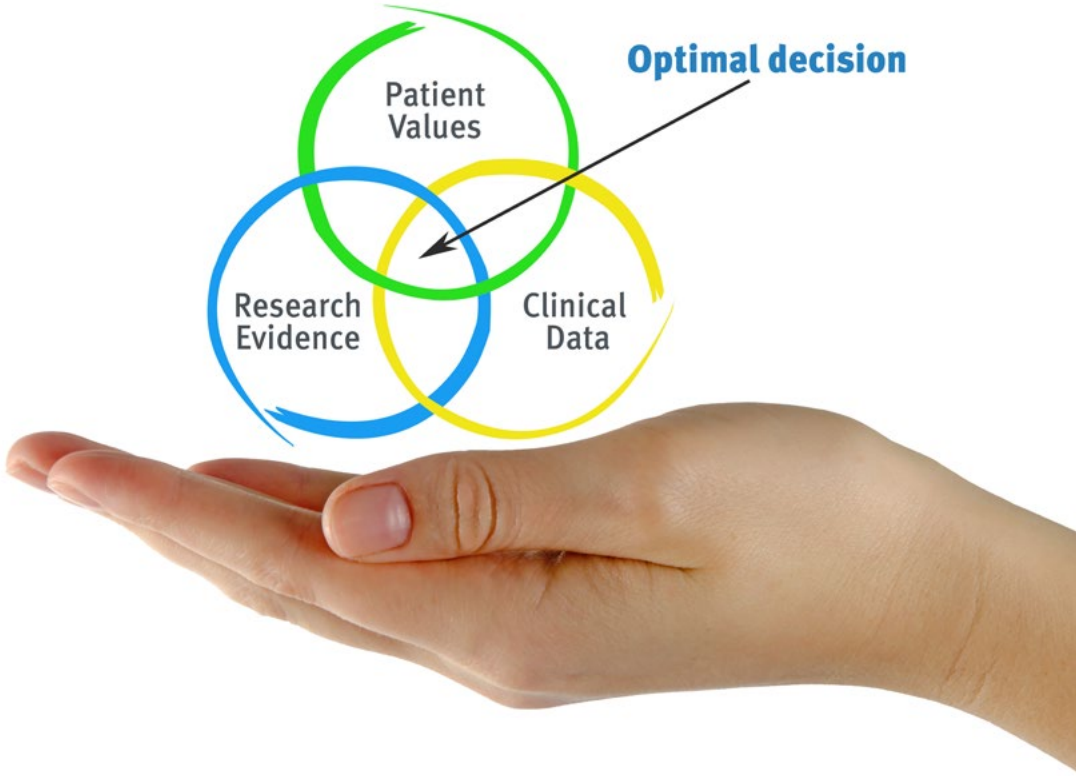
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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.

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:

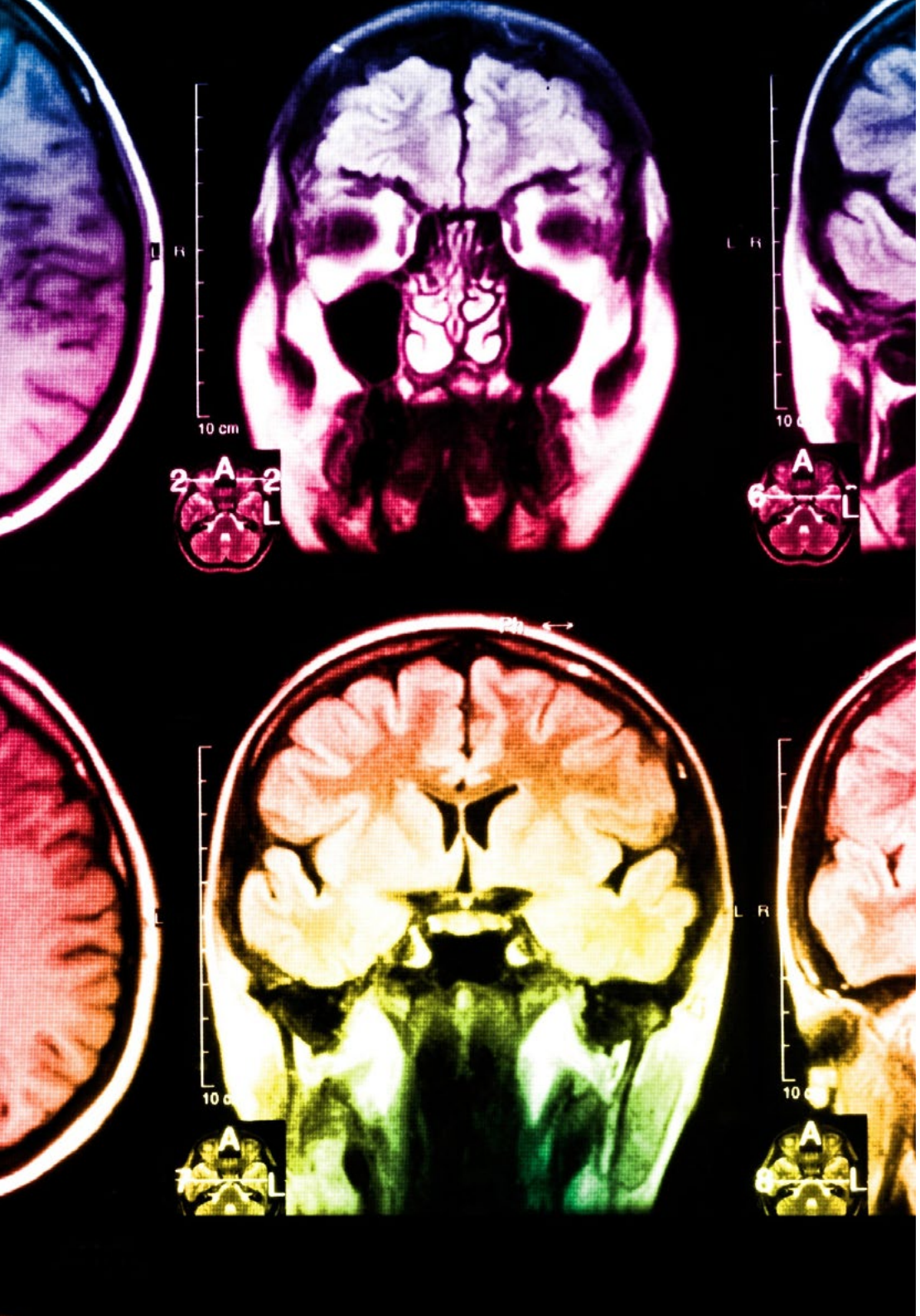
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better 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.

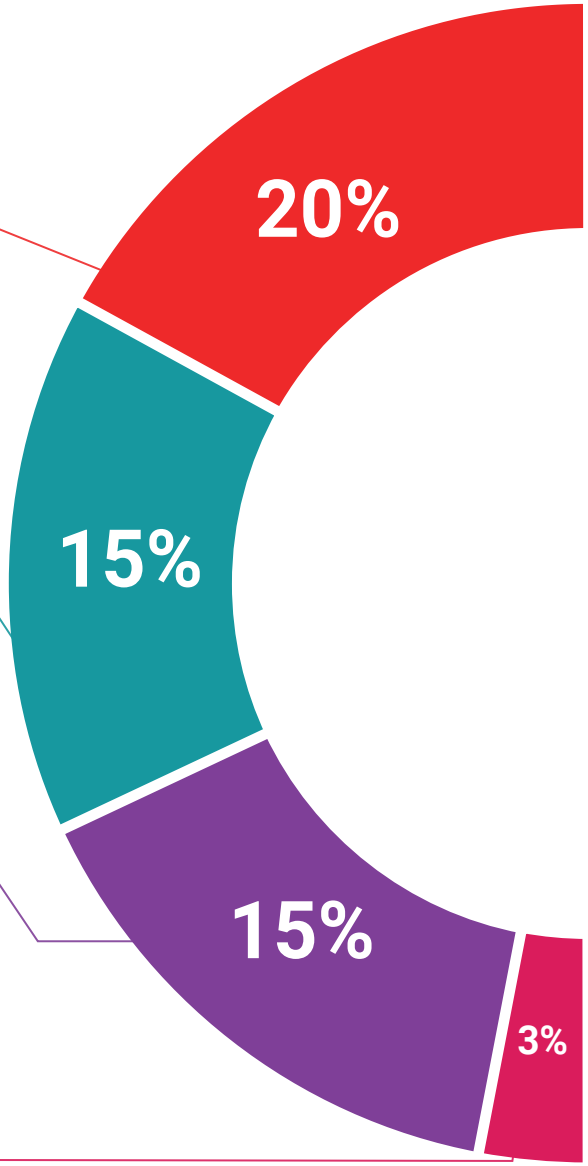
Interactive Summaries

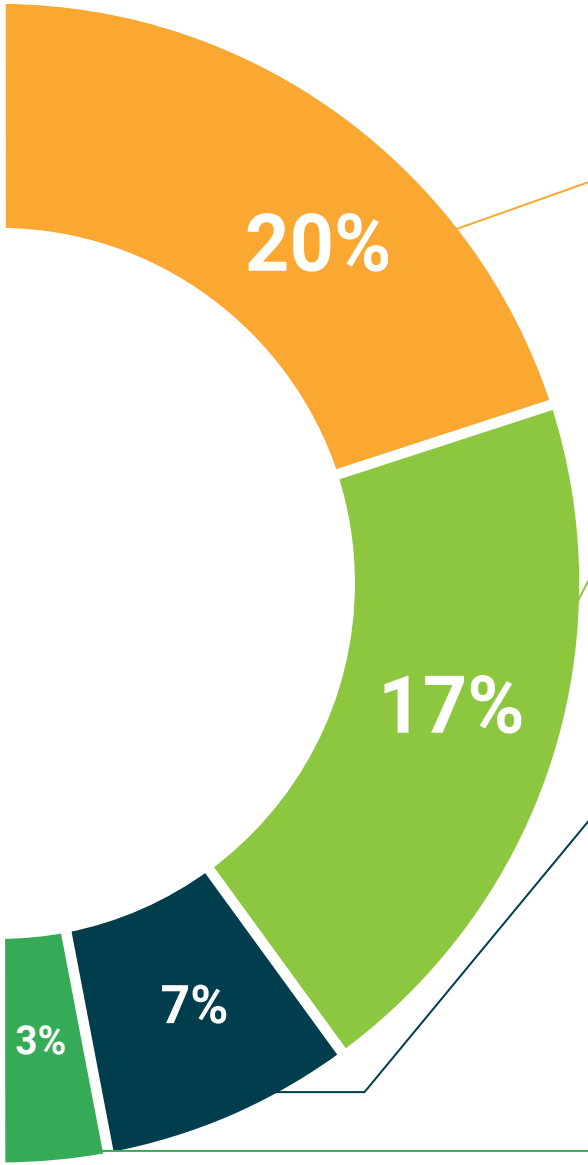
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 Diploma in Mycobacterial Infections in Special Population Groups guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.

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

This **Postgraduate Diploma in Mycobacterial Infections in Special Population Groups** 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 Diploma** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect 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 Mycobacterial Infections in Special Population Groups**

Official No. of Hours: **450 h.**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Awards the followi ng

DIPLOMA

to

Mr./Ms. _____, with identification number _____ .

For having passed and accredited the following progra m

POSTGRADUATE DIPLOMA

in

Mycobacterial Infections in Special Population Groups

This is a qualification awarded by this University, equivalent to 450 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.

June 17, 2020

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This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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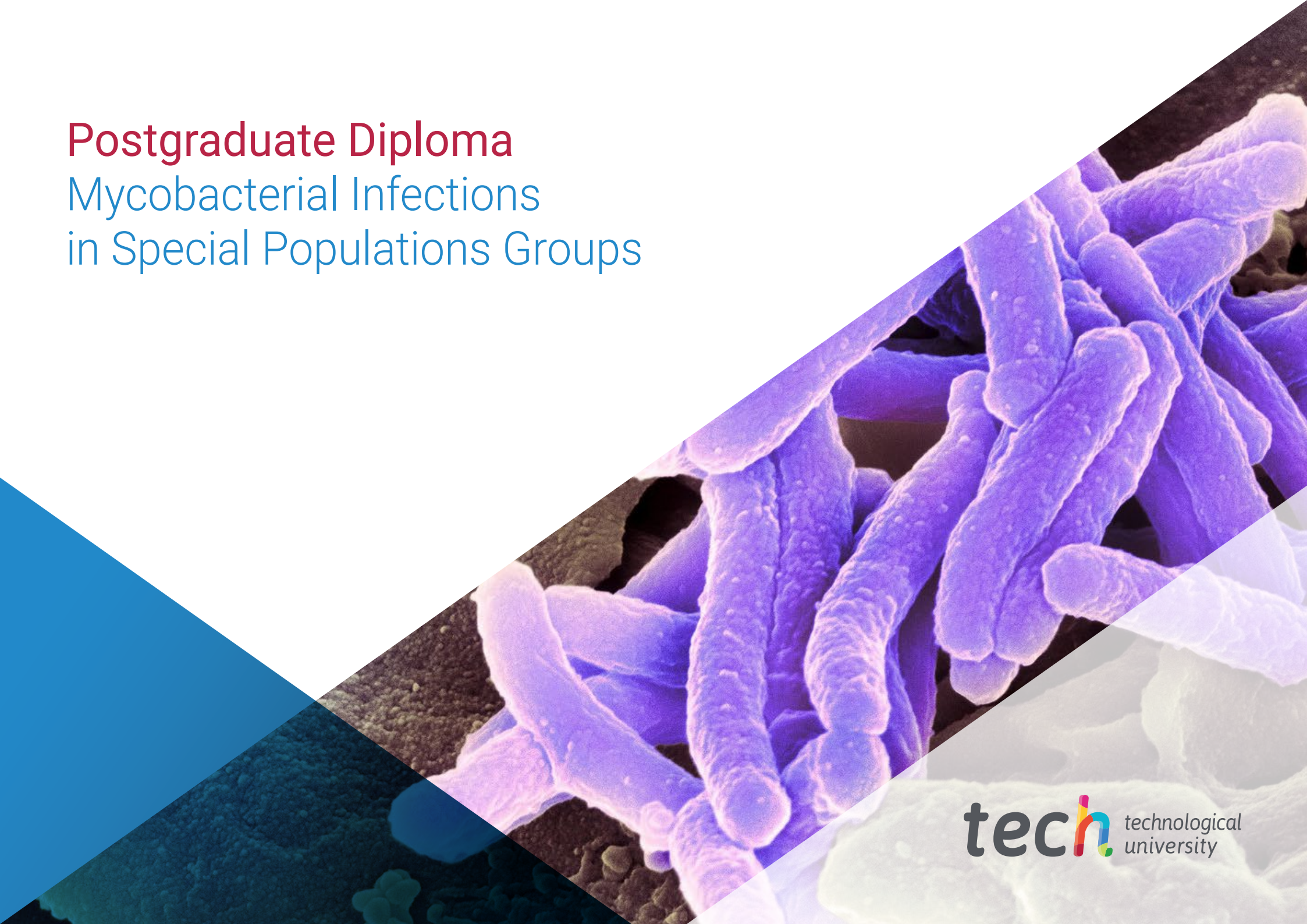

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