**Postgraduate Certificate** Advances in Antimycotics





# **Postgraduate Certificate** Advances in Antimycotics

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 5 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/pharmacy/postgraduate-certificate/advances-antimycotics

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# 01 Introduction

Fungi are everywhere and some are so small that they cannot be seen with the naked eye. Thus, an infection by these agents can cause discomfort such as irritation, rash and, in some cases, become more serious. Thus, over the years, antifungal agents have been developed to combat and destroy these infections. This program offers all the knowledge to specialize in this type of drugs, representing an opportunity to advance and fulfill the professional objectives of pharmacists.



Antifungals destroy and stop fungal infections. Studying them is fundamental for professional growth."

## tech 06 | Introduction

Preventing the proliferation of fungal diseases remains an important task in the 21st century. For this reason, the development of new antifungal drugs has become a booming sector, requiring more professionals specialized in all aspects involved in this area. With this in mind, the following Postgraduate Certificate will provide an opportunity for pharmacists to learn the general postulates of antifungals.

In this sense, the agenda will begin by addressing the essential aspects of antifungals, such as their classification according to their chemical structure and their area of action (local and systemic). Next, an in-depth study will be conducted on Amphotericin B, which is used to treat severe and potentially life-threatening fungal infections.

In each class, the student will have an in-depth study of the different infections caused by fungi in the lungs, such as Cryptococcosis and Coccidioidomycosis. To conclude the program, hepatic toxicity levels of some antifungal agents will be evaluated. This **Postgraduate Certificate in Advances in Antimycotics** contains the most complete and up-to-date educational program on the market. The most important features include:

- The development of case studies presented by experts focused on advances in antibiotic therapy and antibiotic resistance.
- 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 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

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Learn in detail about the latest discoveries in antifungals and position yourself as an expert in the field".

## Introduction | 07 tech

Exceed your limits. Specialize in the latest antifungal advances and contribute to new research."

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.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an 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 student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Sign up and learn the latest advances in antifungals thanks to this program.

You will understand how antimycotics work, evaluating different practical cases.

# 02 **Objectives**

The main goal of this Postgraduate Certificate is to provide students with the most current and specialized knowledge in antifungals, in order to help them in their professional careers. Thanks to this, they will be able to further develop different drugs for fungal infections of the skin, lungs and other areas of the body. Being able to participate in independent research or be part of an international infectious disease organization.



*Reach new professional goals thanks to the qualification of this Postgraduate Certificate".* 

## tech 10 | Objectives



## **General Objectives**

- Guarantee professional improvement by constantly delving deeper and updating what we know.
- Know the scientific evidence on antibiotic therapy and antimicrobial resistance.
- Establish the correct use of drugs and the proper treatment of infectious diseases.
- Use a multidisciplinary and integrative approach to facilitate the control of these pathologies.



666 It will take you six weeks to learn everything you need to be an antifungal expert."



# Objectives | 11 tech





## Specific Objectives

- Provide an overview of antifungal agents according to their chemical and systemic classification
- Know the new developments on the toxicity of antifungal agents and their present and future indications
- Delve into the treatment of deep mycoses, using Aspergillosis, Cryptococcosis and Histoplasmosis
- Analyze the hepatic toxicity of systemic antifungal agents

# 03 Course Management

Due to the importance of new antifungal development for the scientific community, TECH has assembled an excellent teaching staff, certified and qualified in the latest advances in this field. In addition, they have held various important positions in international organizations, dedicating their professional practice in various countries with a high incidence of infections of this type.

Course Management | 13 tech

Count on an elite team to continue your professional journey".

## tech 14 | Course Management

### Management



### Dr. Quintero Casanova, Jesús

- Degree in Medicine and Surgery from the Medical University of Havana. Cuba
- Specialist in Internal Medicine. "Héroes del Baire" Hospital
- Professional Master's Degree in Tropical Diseases and Clinical Infectious Diseases from the Pedro Kuori Institute, Havana. Cuba
- Head of the Infectious Diseases Department of the Héroes del Baire Hospital
- Member of the Cuban Society of Internal Medicine
- Member of the Cuban Society of Paediatricians
- Medical specialist in Africa (TChad) and Venezuela
- Professor on the Medicine Degree and Internal Medicine Speciality at the Faculty of Medical Sciences of Isla de la Juventud
- Main professor of the Professional Master's Degree in infectious diseases of the Faculty of Medical Sciences of the Isle of Youth.
- Member of state examining boards for the medicine degree and internal medicine
- National Research Award in Cuba
- Medical Science Teaching Award. Cuba

## Course Management | 15 tech

## Professors

#### Dr. Valle Vargas, Mariano

- Head of the Internal Medicine Department of the Héroes del Baire Hospital
- Member of the Cuban Society of Internal Medicine
- Member of the Cuban Society of Paediatricians
- Medical specialist in Venezuela
- Professor on the Medicine Degree and Internal Medicine Speciality at the Faculty of Medical Sciences of Isla de la Juventud
- Professor of the Professional Master's Degree in Infectious Diseases in the Faculty of Medical Sciences in Isla de la Juventud
- Member of state examining boards for the medicine degree and internal medicine
- Member of tribunals for national scientific events. Cuba
- Degree in Medicine and Surgery from the University of Havana. Cuba
- \* Specialist in Internal Medicine. "Héroes del Baire" Hospital
- Master's Degree in Health Biostatistics
- Diploma in Epidemiology
- Medical Science Teaching Award. Cuba

### Dr. Cantalapiedra Torres, Alejandro

- Member of the Cuban Society of Pediatrics
- Professor in the Medicine Degree and Pediatrics Specialty in the Faculty of Medical Sciences in Isla de la Juventud
- Member of tribunals for national scientific events. Cuba
- Medical specialist in Haiti
- Medical specialist in Antigua and Barbuda year 2008
- \* Degree in Medicine and Surgery from the University of Havana. Cuba
- Pediatrician. "Héroes del Baire" Hospital
- Master's Degree in infectious diseases
- Certificate in Medical Teaching
- Certificate in Health Management

#### Dr. Laurence Carmenaty, Araelis

- Professor on the Medicine Degree in the Faculty of Medical Sciences in Isla de la Juventud
- Member of the Cuban Society of Microbiology
- Member of the Association of Pedagogues
- Degree in Microbiology University of Havana
- Master's Degree in infectious diseases
- She has participated in national and international microbiology events in Cuba and Venezuela.

## tech 16 | Course Management

#### Dr. Dranguet Bouly, José Ismael

- Head of the Internal Medicine Department of the Héroes del Baire Hospital
- Member of the Cuban Society of Internal medicine and the Cuban Society of Intensive Therapy
- Member of the Cuban Society of Paediatricians
- Medical specialist in Mozambique
- Professor on the Medicine Degree and Internal Medicine Speciality at the Faculty of Medical Sciences of Isla de la Juventud
- Professor of the Professional Master's Degree in Infectious Diseases in the Faculty of Medical Sciences in Isla de la Juventud
- Member of state examining boards for the medicine degree and internal medicine
- Member of tribunals for national scientific events. Cuba
- Professor at the Catholic University of Santiago de Guayaquil, Ecuador.
- Degree in Medicine and Surgery from the University of Havana. Cuba
- Specialist in Internal Medicine and Intensive Therapy. "Héroes del Baire" Hospital
- Master's Degree in Infectious Diseases from the Pedro Kouri Institute of Cuba
- Medical Science Teaching Award. Cuba

## Dr. González Fiallo, Sayli

- Professor of the Faculty of Medical Sciences in Isla de la Juventud
- Director of the Health Analysis, Biostatistics, and Surveillance Unit of the Municipal Health Directorate. Isle of Youth
- Degree in Hygiene and Epidemiology
- Master's Degree in Epidemiology

## Dr. Dávila, Henry Luis

- Member of the Cuban Society of Gynecology and Obstetrics
- Member of the Cuban Society of Paediatricians
- Medical specialist in Guatemala
- Professor on the Medicine Degree in the Faculty of Medical Sciences in Isla de la Juventud
- Member of state examination boards in the field of medicine
- Member of tribunals for national scientific events. Cuba
- National research award. Cuba
- Degree in Medicine and Surgery from the University of Havana. Cuba
- \* Specialist in Gynecology and Obstetrics at Héroes del Baire Hospital. Cuba
- Master's Degree in comprehensive care for women
- Head of the Neck Pathology Service at Héroes del Baire Hospital
- Medical Science Teaching Award. Cuba

#### Dr. Jiménez Valdés, Erlivan

- Member of the Cuban Society of Pediatrics
- Professor in the Medicine Degree and Pediatrics Specialty in the Faculty of Medical Sciences in Isla de la Juventud
- Member of tribunals for national scientific events. Cuba
- Medical specialist in Venezuela
- Degree in Medicine and Surgery from the University of Havana. Cuba
- Pediatrician. "Héroes del Baire" Hospital
- Master's Degree in comprehensive childcare

## Course Management | 17 tech



## Dr. Batista Valladares, Adrián

- Head of Senior Citizen Services in Isla de la Juventud. Cuba
- Member of the Cuban Society of Family Medicine
- Professor of the career of medicine and specialty of family medicine at the Isle of Youth Faculty of Medical Sciences.
- Professor of the Professional Master's Degree in Infectious Diseases in the Faculty of Medical Sciences in Isla de la Juventud
- Member of state examining boards for the medicine degree and speciality of family medicine
- Member of tribunals for national scientific events. Cuba
- Degree in Medicine and Surgery from the University of Havana. Cuba
- Specialist in Family and Community Medicine
- Master's Degree in Clinical Infectology
- Certificate in Diagnostic Ultrasound
- Diploma in healthcare management

# 04 Structure and Content

The program of this Postgraduate Certificate in Advances in Antimycotics has been designed to provide students with the necessary tools to improve their professional performance in this field. For this reason, not only will you have an excellent teaching staff, but also the latest content in the area. This combination will allow them to assimilate the approaches immediately. In addition, thanks to the degree, they will be able to access new professional options, allowing them to develop research or be in charge of a specialized center.

Enroll now and get access to the best content to specialize in antifungals".

## tech 20 | Structure and Content

#### Module 1. Antimycotics

- 1.1. General Elements
  - 1.1.1. Concept
  - 1.1.2. Origins and Development
- 1.2. Classification
  - 1.2.1. Classification According to Chemical Structure
  - 1.2.2. Classification According to Action: Local and Systemic
- 1.3. Mechanisms of action
  - 1.3.1. Mechanisms of Action of Antifungal Agents
- 1.4. Systemic Antifungal Agents: News on their Toxicity and their Present and Future Indications
  - 1.4.1. Antimicrobial Spectrum
  - 1.4.2. Pharmacokinetics and Pharmacodynamics
  - 1.4.3. Therapeutic Uses
  - 1.4.4. Adverse Effects
  - 1.4.5. Presentation and Dosage
- 1.5. Amphotericin B: Novel Concepts in its Use
  - 1.5.1. Mechanism of Action
  - 1.5.2. Antimicrobial Spectrum
  - 1.5.3. Pharmacokinetics and Pharmacodynamics
  - 1.5.4. Therapeutic Uses
  - 1.5.5. Adverse Effects
  - 1.5.6. Presentation and Dosage
- 1.6. Deep Mycosis Treatment: Current Events and Future Perspectives
  - 1.6.1. Aspergillosis
  - 1.6.2. Coccidioidomycosis
  - 1.6.3. Cryptococcosis
  - 1.6.4. Histoplasmosis

- 1.7. Local Antifungals
  - 1.7.1. Antimicrobial Spectrum
  - 1.7.2. Pharmacokinetics and Pharmacodynamics
  - 1.7.3. Therapeutic Uses
  - 1.7.4. Adverse Effects
  - 1.7.5. Presentation and Dosage
- 1.8. Treatment of Skin and Mucous Mycosis
  - 1.8.1. Tinea Capitis
  - 1.8.2. Skin Tinea
  - 1.8.3. Onychomycosis
- 1.9. Liver Toxicity of Systemic Antifungal Agents: Future Challenges
  - 1.9.1. Liver Metabolism of Antifungal Agents
  - 1.9.2. Hepatotoxicity of Antifungal Agents

There are no programs on the market that combine the professional expertise of the teachers and the most innovative antifungal content."

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# 05 **Methodology**

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: *Re-learning*.

This teaching system is used 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 Re-learning, 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*".

## tech 24 | Methodology

## At TECH we use the Case Method

In a given clinical 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. Pharmacists learn better, more quickly 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, attempting to recreate the actual conditions in a pharmacist'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. Pharmacists who follow this method not only achieve the assimilation of concepts, but also develop their mental capacity through exercises to evaluate real situations and apply 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.



## tech 26 | Methodology

## **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.

Pharmacists will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-ofthe-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 115,000 pharmacists with unprecedented success, in all clinical specialties. Our pedagogical methodology is developed in a highly demanding environment, with a university student body with a high socioeconomic profile and an average age of 43.5 years old.

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.



## tech 28 | Methodology

In this program you will have access to the best educational material, prepared with you in mind:



#### **Study Material**

All teaching material is created specifically for the course by specialist pharmacists who will be teaching the course, so that the didactic development is highly specific and accurate.

20%

15%

3%

15%

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.



#### **Video Techniques and Procedures**

We bring you closer to the latest techniques, to the newest educational advances, to the forefront of current pharmaceutical care procedures. 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.

20%

3%

7%

17%



#### **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.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



#### 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.

# 06 **Certificate**

This Postgraduate Certificate in Advances in Antimycotics: guarantees, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Global University.

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Successfully complete this training and receive your university degree without travel or laborious paperwork".

## tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Advances in Antimycotics** 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 Advances in Antimycotics Modality: online Duration: 6 weeks Accreditation: 5 ECTS



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

tech global university Postgraduate Certificate Advances in Antimycotics » Modality: online » Duration: 6 weeks » Certificate: TECH Global University » Credits: 5 ECTS

- » Schedule: at your own pace
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**Postgraduate Certificate** Advances in Antimycotics

