Postgraduate Diploma

Skin Microbiota in Pharmacy

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Postgraduate Diploma
Skin Microbiota in Pharmacy

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/pharmacy/postgraduate-diploma/postgraduate-diploma-skin-microbiota-pharmacy**

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01

Introduction

Scientific research in the field of Microbiota has been booming in recent decades, aimed both at the study of its characteristics and its impact on our health. In each of the different locations of our body, such as the skin, mucous membranes, respiratory tract, vagina or digestive tract, we can find complex microbial ecosystems adapted to the particularities of each niche. Of all of them, the one that requires a deeper knowledge is the one found in the skin, which is why TECH professionals have designed this training program aimed helping pharmacists to be aware of all aspects regarding skin microbiome. Thus, professionals will be able to understand the reasons for the appearance of certain skin pathologies, offering a higher rate of positive results through the use of appropriate drugs.

The study of Skin Microbiota opens the door to a wealth of knowledge ideal for daily professional practice as a pharmacist"

Abundant scientific evidence has demonstrated the role of skin microbiome in the appearance of various skin pathologies, giving rise to new therapeutic strategies to control and regulate these situations. The study of this ecosystem is a rapidly advancing scientific field in which it is universally accepted that to achieve an adequate state of health it is also necessary to have a "healthy" Microbiota.

Human Microbiota undergoes changes as a consequence of the influence of multiple factors, diet, lifestyle and pharmacological treatments generating, among others, which alter the bacterial ecosystem and may cuase abnormal interaction with the organism, and it is related to certain processes: allergies, acute and chronic intestinal diseases, obesity and metabolic syndrome, neurological diseases, dermatitis and other alterations in the dermis, and even some types of cancer.

This Postgraduate Diploma in Skin Microbiota in Pharmacy focuses on providing pharmacists with the necessary information on issues related to Cutaneous Microbiota, its Eubiosis and Dysbiosis, and related problems. This will enable you to treat patients with this type of problems, offering them a therapeutic drug of better quality and having a much clearer idea of the state of their health.

Likewise, the use of Probiotics and Prebiotics, and the growing market launch of new products with very specific strains skin problems and diseases, will also be addressed. All this content will make it possible for Pharmacy professionals to be prepared to offer effective solutions to patients with this type of pathology, knowing how to guide them so that they can recover and maintain their cutaneous microbiota and, consequently, a good state of health.

This Postgraduate Diploma in Skin Microbiota in Pharmacy comprises the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Practical cases presented by Skin Microbiota experts. 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.
- Latest developments in Skin Microbiota.
- It contains practical exercises where the self-evaluation process can be carried out to improve learning.
- Special focus on innovative methodologies in Skin Microbiota.
- All of this will be complemented by 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.

TECH provides you with the latest knowledge on Skin Microbiota so that you can become a successful Pharmacist"

This Postgraduate Diploma is the best investment you can make in selecting a refresher program in the field of pharmacy"

The Postgraduate Diploma allows training through simulated environments, which provide immersive learning programmed to train for real situations.

Thanks to this 100% online training, you can perfectly balance it with the rest of your daily activities.

The teaching staff includes professionals from the field of Skin Microbiota in Pharmacy, who bring their 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 program to train in real situations.

The program design is based on Problem-Based Learning, by means of which the student must try to solve the different professional practice situations that arise throughout the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts in the field of Skin Microbiota in Pharmacy with extensive teaching experience.

02

Objectives

The main objective of the program is the development of theoretical and practical learning, so that the professional can practically and rigorously master the study of Microbiotics in daily professional practice. Consequently, the Postgraduate Diploma in Skin Microbiota in Pharmacy responds to the continuous professional demand for quality specialization in this area, which serves as a vehicle to use microbiotic therapy as a means of healing skin diseases and as a preventive tool in maintaining patient health at all ages.

This Postgraduate Diploma, designed with the latest educational technology, will allow you to learn all the advances in cutaneous microbiotics, making you a first level Pharmacist"

General Objectives

- This Postgraduate Diploma fulfills a need in today's society, a quality and updated training program that allows for the use of microbiological therapy as a preventive or therapeutic tool for health maintenance.
- Offer a comprehensive and broad view of the current state of the field of human microbiota, in its broadest sense, the importance of the balance of this microbiota as a direct effect on our health, with the multiple factors that influence it positively and negatively.
- Arguments based in scientific evidence show how Microbiota and its interaction with many non-digestive pathologies of autoimmune nature, or its relation with the dysregulation of the immune system, its capacity for disease prevention and as a support to other medical treatments, are all currently being given a privileged position.
- Promote work strategies based on the integral approach of the patient as a reference model, not only focusing on the symptomatology of the specific disease, but also looking at its interaction with the microbiota and how it may be influencing it.
- Encourage professional stimulus through continuing education and research.

Specific Objectives

- Become familiar with skin physiology and its microbial composition.
- Understand the factors that regulate the type of bacterial flora in the skin: sweat glands, sebaceous glands, and desquamation.
- Delve deeper into the factors that alter the skin ecology and Microbiota.
- Become acquainted with the cutaneous immune system.
- Understand the factors that produce an alteration of the normal cutaneous microbiota (dysbiosis) and an alteration of the barrier function.
- Know the triggered cutaneous pathologies: Psoriasis (Streptococcus pyogenes), Acne vulgaris, Atopic dermatitis, Rosacea.
- Delve into how the use of Probiotics contributes to the prevention and treatment of different skin diseases.
- Delve into the current lines of research.

Take this opportunity and take the step to get up-to-date on the latest developments in Skin Microbiota in Pharmacy"

03

Course Management

The program's teaching staff includes leading specialists in Human Microbiota and other related areas, who bring their years of work experience to this specialization program. In addition, other specialists of recognized prestige participate in its design and elaboration, completing the program in an interdisciplinary manner. All of which is carried out with the aim of providing Pharmacists with the most complete educational information and contents so that they can practice their profession with greater guarantees of success and treat patients with skin problems with a deeper knowledge of the functioning of their microbiota and its relevance to health.

Learn from leading professionals the latest advances in Skin Microbiota in Pharmacy"

International Guest Director

Dr. Harry Sokol is internationally recognized in the field of Gastroenterology for his research on the gut microbiota. With more than 2 decades of experience, he has established himself as a true scientific authority thanks to his numerous studies on the role of microorganisms in the human body and their impact on chronic inflammatory bowel diseases. In particular, his work has revolutionized medical understanding of this organ, often referred to as the "second brain."

Among Dr. Sokol's contributions, he and his team have opened a new line of advances on the bacterium Faecalibacterium prausnitzii. In turn, these studies have led to crucial discoveries about its anti-inflammatory effects, opening the door to revolutionary treatments.

In addition, the expert is distinguished by his commitment to the dissemination of knowledge, whether by teaching academic programs at the Sorbonne University or by publishing works such as the comic book The Extraordinary Powers of the Belly. His scientific publications appear continuously in world-renowned journals and he is invited to specialized congresses. At the same time, he carries out his clinical work at the Saint-Antoine Hospital (AP-HP/University Hospital Federation IMPEC/Sorbonne University), one of the most renowned hospitals in Europe.

On the other hand, Dr. Sokol began his medical studies at Paris Cité University, showing early on a strong interest in health research. A chance meeting with the eminent Professor Philippe Marteau led him to Gastroenterology and the enigmas of the Intestinal Microbiota. Throughout his career, he also broadened his horizons by training in the United States, at Harvard University, where he shared experiences with leading scientists. Upon his return to France, he founded his own team where he researches on Fecal Transplantation, offering state-of-the-art therapeutic innovations.

Dr. Sokol, Harry

- Director of Microbiota, Gut and Inflammation at Sorbonne University, Paris, France
- Specialist Physician at the Gastroenterology Department of the Saint-Antoine Hospital (AP-HP), Paris, France
- Group Leader at the Institut Micalis (INRA)
- Coordinator of the Center of Microbiome Medicine of Paris FHU
- Founder of the pharmaceutical company Exeliom Biosciences (Nextbiotix)
- President of the Fecal Microbiota Transplantation Group
- Medical Specialist in different hospitals in Paris
- Doctorate in Microbiology at the Université Paris-Sud
- Postdoctoral Fellowship at the Massachusetts General Hospital, Harvard University Medical School
- Degree in Medicine, Hepatology and Gastroenterology at Université Paris Cité

Thanks to TECH, you will be able to learn with the best professionals in the world"

Management

Mrs. Fernández Montalvo, Mª Ángeles

- Degree in Biochemistry from the University of Valencia.
- Specialist Degree in Nutrition, Dietetics, and Diet Therapy.
- Specialist Degree in Microbiological Food Analysis.
- Specialist Degree in Nutrition, Food, and Cancer. Prevention and Treatment.
- Specialist Degree in Vegetarian, Clinical, and Sports Nutrition.
- Specialist in food intolerances and the study of the intestinal microbiota.
- Numerous courses on Intestinal Microbiota, methods of analysis, and applications.
- Diploma in Natural and Orthomolecular Medicine.
- Specialist Degree in the current use of Nutricosmetics and Nutraceuticals in general.
- Specialist Degree in point-of-sale management in Pharmacies and Parapharmacies.
- Member of the Spanish Society of Probiotics and Prebiotics (SEPyP).
- Member of the Spanish Society of Dietetics (SEDCA).
- Member of the Spanish Society of Nutrition (SEÑ).

Professors

Dr. Álvarez García, Verónica

- Degree in Medicine.
- Digestive system specialist at the Central Hospital of Asturias (HUCA).

Dr. Díaz Martín, Juan José

- Pediatric gastroenterologist at the Central Hospital of Asturias (HUCA).
- Member of the Spanish Society of Pediatric Gastroenterology, Hepatology, and Nutrition.
- Associate Professor of Pediatrics at the University of Oviedo

Dr. Fernández Madera, Juan José

- Degree in Medicine.
- Specialist in Clinical Allergology and Immunology.
- Specialist in Sports Medicine.

Dr. Gonzalez Rodríguez, Silvia P.

- PhD in Medicine and Surgery from the University of Alcalá de Henares, specialty in Gynecology.
- Deputy Medical Research Coordinator and Clinical Chief of the Menopause and Osteoporosis Unit at the Velázquez Medical Cabinet (Madrid).

Dr. Lombó Burgos, Felipe

- Doctor in Biology from the University of Oviedo.
- Full professor at the University of Oviedo.

Dr. López López, Aranzazu

- Ph.D. in Biological Sciences
- Researcher in oral microbiology at the FISABIO Foundation.
- Public Health Research Center of Valencia.

Dr. Méndez García, Celia

- Doctorate in Microbiology from the University of Oviedo.
- Research at Novartis Laboratories (Boston).

Dr. Solís Sánchez, Gonzalo

- Neonatologist at the Central University Hospital of Asturias (HUCA).
- Researcher, Associate Professor at the University of Oviedo.

Dr. Suárez Rodríguez, Marta

- Neonatologist at the Central University Hospital of Asturias (HUCA).
- Researcher and Professor in the Professional Master's Degree in Early Care and the Professional Master's Degree in Critical Care Nursing at the University of Oviedo and other training courses.

04

Structure and Content

The structure of the contents has been designed by a team of professionals from the best hospital centers and universities in the country, who are aware of the relevance of up-to-date specialization to be able to prevent, detect, and treat pathologies related to alterations in Skin microbiota, and are committed to quality teaching through new educational technologies. All of which aimed at training pharmacists to be much more competent and prepared to offer treatments that help and favor the cutaneous microbiome of patients.

The best contents are at the best University. Don't miss the opportunity to train in Skin Microbiotics with greater guarantees of success.

Module 1. Skin Microbiota

1.1. Skin Physiology Microbial Composition of the Skin

1.2. Factors Regulating the Type of Bacterial Flora on the Skin: Sweat Glands, Sebaceous Glands, and Desquamation

1.2.1. Factors that Alter the Ecology of the Skin and the Microbiota

1.3. Cutaneous Immune System Epidermis - An Essential Element in our Defences

1.3.1. Elements of the Skin Immune System: Cytokines, Keratinocytes, Dendritic Cells, Lymphocytes, Antimicrobial Peptides

1.3.2. Influence of the Skin Microbiota on the Skin Immune System Staphylococcus Epidermidis, Staphylococcus Aureus

1.4. Alteration of the Normal Cutaneous Microbiota (dysbiosis) and Alteration of the Barrier Function

1.5. Triggered Skin Diseases: Psoriasis (Streptococcus pyogenes), Acne vulgaris, Atopic dermatitis, Rosacea

1.6. Influence of the Use of Probiotics in the Prevention and Treatment of Different Skin Diseases

1.7. Current Lines of Research

Module 2. Microbiota. Microbiome. Metagenomics

2.1. Definition and Relationship between Them
2.2. Composition of the Microbiota: Genera, Species, and Strains
  2.2.1. Characteristics and Main Functions
  2.2.2. Groups of Microorganisms that Interact with Humans: Bacteria, Fungi, Viruses, and Protozoa
  2.2.3. Key Concepts; symbiosis, Commensalism, Mutualism, Parasitism
  2.2.4. Autochthonous Microbiota
2.3. Different Human Microbiota General Overview of Eubiosis and Dysbiosis
  2.3.1. Gastrointestinal Microbiota
  2.3.2. Oral Microbiota
  2.3.3. Skin Microbiota in Pharmacy
  2.3.4. Respiratory Tract Microbiota
  2.3.5. Urinary Tract Microbiota
  2.3.6. Reproductive System Microbiota
2.4. Factors that Influence Microbiota Balance and Imbalance
  2.4.1. Diet and Lifestyle Intestinal-Brain Axis
  2.4.2. Antibiotic Therapy
  2.4.3. Epigenetic-Microbiota Interaction Endocrine Disruptors
  2.4.4. Probiotics, Prebiotics, and Symbiotics Concepts and Overviews
  2.4.5. Latest Advances in Fecal Transplants

Module 3. Microbiota and the Immune System

3.1. Immune System Physiology
3.2. Nutrition and Lifestyle: Immune System and Microbiota Interaction
3.3. Functional Foods (Probiotics and Prebiotics), Nutraceuticals, and the Immune System
3.4. Bidirectional Relationship between Microbiota and Neuroimmunoendocrine System
3.5. Microbiota, Immunity and Nervous System Disorders: Anxiety, Depression, Autism, Schizophrenia, or Alzheimer's disease
3.6. The Gut-Microbiota-Brain Axis
3.7. Current Lines of Research

05

Methodology

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

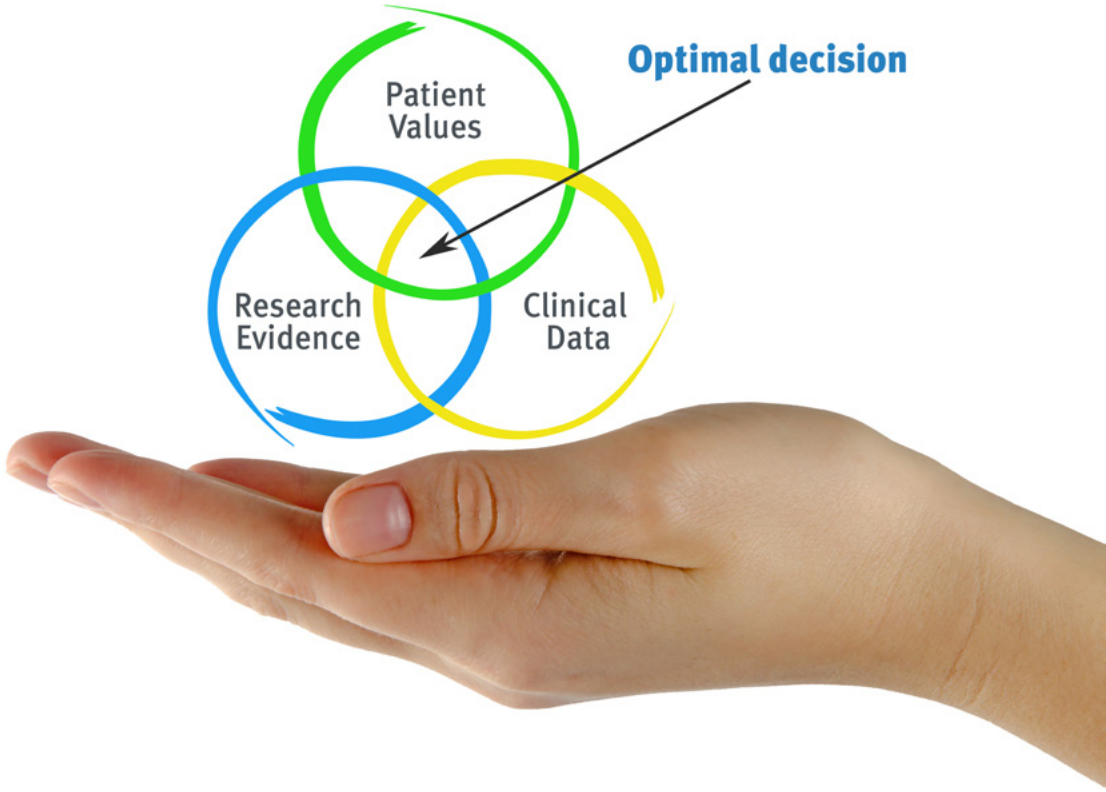
This teaching system is used in the most prestigious medical schools in the world, and major publications such as the ***New England Journal of Medicine*** have considered it to be one of the most effective.

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.

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:

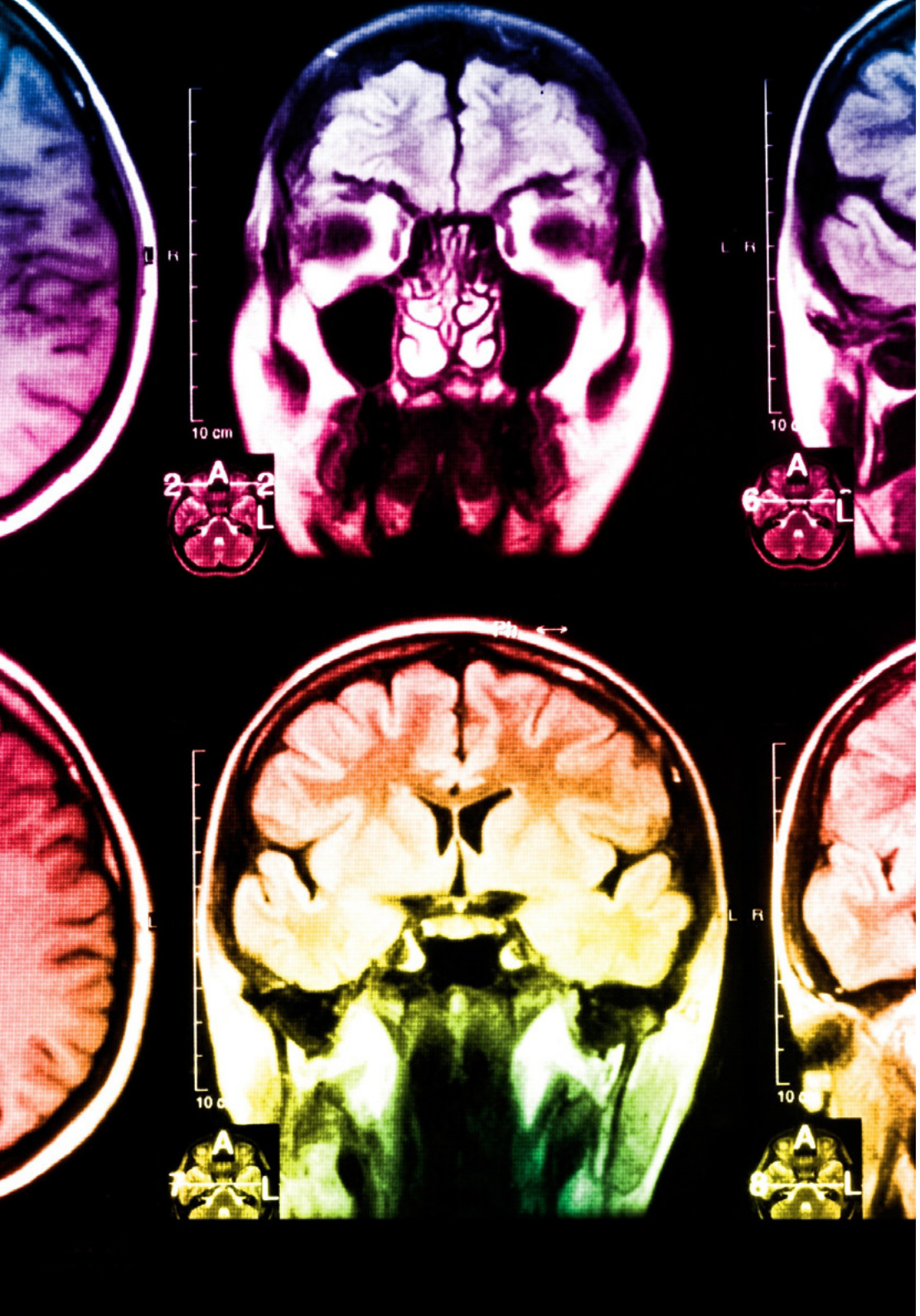
1. Pharmacists who follow this method not only achieve the assimilation of concepts, but also develop their mental capacity through exercises to evaluate real situations and apply their knowledge.
2. The learning process has a clear focus on practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
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.

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-of-the-art software to facilitate immersive learning.



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). Hence, 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 TECH Specialist Diploma you will have access to the best educational material, prepared with you in mind:

Study Material

After a complex production process, we transform the best content into high-quality educational and audiovisual multimedia. We select the best syllabus and make it available to you. Everything you need to acquire in-depth knowledge of a discipline, from A to Z. Lessons written and chosen by specialists in each of the disciplines.

Surgical techniques and clinical procedures on video

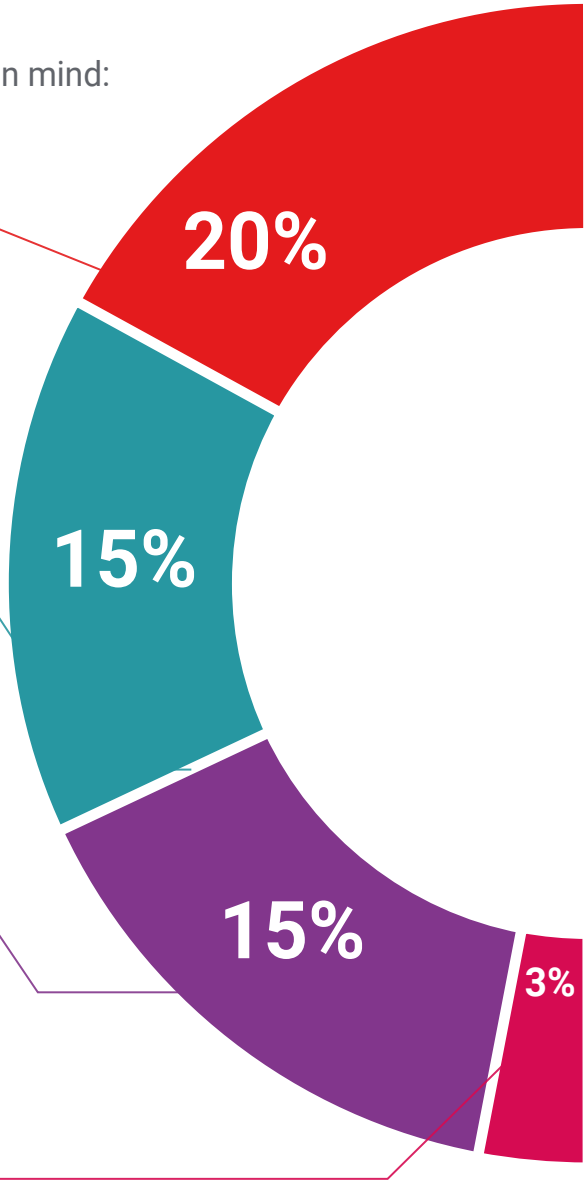
We bring you closer to the newest techniques, to the latest scientific advances, and to the forefront of medical news. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.

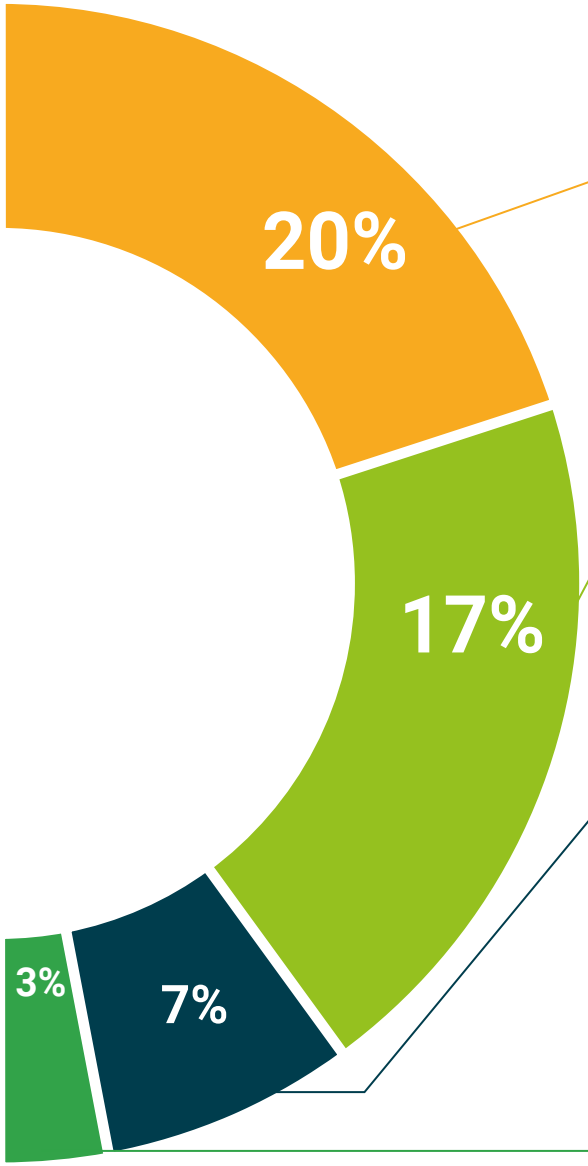
Interactive Summaries

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 training system for presenting multimedia content 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

Through the narratives of expert professionals, it is possible to acquire a high degree of understanding of the most frequent problematic situations. The professional's healthcare practice is not alien to the context in which it takes place. If we want to train ourselves to improve our professional practice, this training must be situated within the context in which it takes place.

Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout this program through activities and evaluative exercises.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an expert strengthens knowledge and recall, and generates confidence in our future difficult decisions

Quick Action Guides

One of the most important functions of our team is to select those contents considered essential and present them in the form of worksheets or quick action guides to facilitate their understanding.

06

Certificate

The Postgraduate Diploma in Skin Microbiota in Pharmacy guarantees, in addition to the most rigorous and up-to-date education, access to a diploma issued by TECH Global University.

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

This private qualification will allow you to obtain a **Postgraduate Diploma in Skin Microbiota in Pharmacy** 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** private qualification 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 Diploma in Skin Microbiota in Pharmacy**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

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

Postgraduate Diploma in Skin Microbiota in Pharmacy

This is a private qualification of 540 hours of duration equivalent to 18 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

Dr. Pedro Navarro Illana
Dean

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 Global University will make the necessary arrangements to obtain it, at an additional cost.

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Postgraduate Diploma
Skin Microbiota in Pharmacy

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- Schedule: **at your own pace**
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Postgraduate Diploma

Skin Microbiota in Pharmacy

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