

Postgraduate Certificate

Skin Microbiota





Postgraduate Certificate Skin Microbiota

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

Website: www.techtitute.com/us/physiotherapy/postgraduate-certificate/skin-microbiota

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01

Introduction

Skin microbiota is an important area of study for the scientific community due to its significant importance for skin health. Complex microbial ecosystems are found in each of the different locations of the human body, which can have negative effects if imbalances occur. For example, these can lead to dermatological infections that cause irritation. Physiotherapy professionals play a key role in preventing the spread of skin diseases and promoting good hygiene practices among their patients. In this regard, experts must have a thorough understanding of the reasons that trigger epidermal diseases. For this reason, TECH presents a pioneering online program that will delve into this subject.





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Thanks to this 100% online Postgraduate Certificate, you will design individualized treatment plans to address imbalances in the Cutaneous Microbiota and associated dermatological conditions”

In recent decades, there has been a growing interest in the Skin Microbiota and its role in skin health. Human skin harbors a diversity of microorganisms that interact with each other to maintain balance and homeostasis. This complex microbial ecosystem plays a key role in protecting against pathogens, regulating the immune system and modulating the inflammatory response. In the field of Physiotherapy, it is essential for specialists to understand the particularities of the Cutaneous Microbiome both to evaluate and treat dermatological conditions and to promote optimal health in the skin of their patients.

In this context, TECH implements an avant-garde Postgraduate Certificate in Skin Microbiota. Designed by professionals in this field, the academic itinerary will delve into key issues such as the physiology, structure or functions of the skin. In this regard, the syllabus will examine the factors that regulate the type of bacterial flora, bearing in mind the sweat and sebaceous glands. The didactic contents will also address the main alterations of the barrier function and the skin pathologies triggered (such as Psoriasis, Atopic Dermatitis or Acne Vulgaris). In this way, graduates will acquire competencies to analyze skin health and design personalized treatment plans that address imbalances in the Cutaneous Microbiota. In addition, a renowned International Guest Director will give an intensive Masterclass for students to implement advanced therapeutic interventions such as the use of topical probiotics.

On the other hand, TECH has put together a complete program, 100% online and totally flexible. The only thing physiotherapists will need to enter the Virtual Campus is an electronic device with an Internet connection (such as a cell phone, computer or tablet). Similarly, the program is based on the Relearning methodology, consisting of the reiteration of key concepts for optimal assimilation of content. In this way experts will enjoy a progressive and natural learning process, without having to resort to costly techniques such as memorization.

This **Postgraduate Certificate in Skin Microbiota** 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 Human Microbiota
- The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- Practical exercises where the self-assessment process can be carried out 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 prestigious International Guest Director will give a comprehensive Masterclass to provide you with sophisticated techniques to strengthen the skin barrier”

“

You will address the influence of the use of Probiotics in the treatment of different skin diseases, among which Rosacea stands out”

The program's teaching staff includes professionals from the field who contribute their work experience to this educational 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 education programmed to learn 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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts.

You will develop advanced skills to prevent skin infections and promote wound healing.

The Relearning method applied by TECH in its programs reduces the long hours of study so common in other teaching methods.



02 Objectives

Through this program, Physiotherapy professionals will stand out for their comprehensive understanding of the Cutaneous Microbiota. In this sense, graduates will understand the relationship it has with various dermatological conditions such as Acne, Dermatitis or Psoriasis. At the same time, specialists will be qualified to carry out evaluations of the health of the dermis using methods that include clinical observation, sample analysis and the use of innovative diagnostic tools. In this regard, experts will carry out therapeutic interventions aimed at modulating the Skin Microbiota through the use of topical probiotics.





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You will develop effective therapeutic interventions to modulate the Skin Microbiota and promote skin health through the use of elements such as topical probiotics”



General Objectives

- ♦ Offer a complete and broad vision of the current situation in the area of the Human Microbiota, in its widest 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
- ♦ Argue with scientific evidence how the Microbiota and its interaction with many non-digestive pathologies is currently being given a privileged position, of an autoimmune nature or its relationship with the dysregulation of the immune system, prevention of diseases and as a support to other treatments in the daily practice of the professional
- ♦ Promote work strategies based on the integral approach of the patient as a reference model not only focusing on the symptomatology of the specific pathology, but also looking at its interaction with the microbiota and how it may be influencing it
- ♦ Encourage professional stimulation through continuous education and research



Designed with the latest educational technology, this university program will keep you at the forefront of advances in Cutaneous Microbiotics and make you a world-class Physiotherapist”





Specific Objectives

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

03

Course Management

TECH's philosophy is based on providing the most complete and updated programs in the academic market, which is why it carries out a meticulous process to select its teaching staff. For this Postgraduate Certificate, TECH has the best specialists in the field of Skin Microbiota. These professionals have extensive work experience, where they have been part of reference health institutions to contribute to the recovery of patients with skin problems. Therefore, students have the guarantees they demand to access a top quality academic experience with which they will raise their professional horizons.



A man in a light blue polo shirt is examining the skin of an elderly person's hand. The background is a soft-focus indoor setting with a plant. The image is partially obscured by a large blue and white geometric overlay on the right side of the page.

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Throughout the program you will have the individualized advice of the teaching team, made up of real experts in Skin Microbiota”

International Guest Director

Harry Sokol, M.D. is internationally recognized in the field of **Gastroenterology** for his research on **Intestinal 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.

In addition, Dr. Sokol began his **medical studies** at the 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 has also broadened his horizons by specializing 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 investigates **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 Exliom Biosciences (Nextbiotix)
- President of the Fecal Microbiota Transplantation Group
- Medical Specialist in different hospitals in Paris
- PhD in Microbiology at the Université Paris-Sud
- Postdoctoral stay 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



Dr. Sánchez Romero, María Isabel

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



Ms. Fernández Montalvo, María Ángeles

- ♦ Head of Naintmed - Nutrition and Integrative Medicine
- ♦ Director of the Master's Degree in Human Microbiota at CEU University
- ♦ Parapharmacy Manager, Nutrition and Natural Medicine professional at Parafarmacia Natural Life
- ♦ Bachelor's Degree in Biochemistry from the University of Valencia
- ♦ Certified in Natural and Orthomolecular Medicine
- ♦ Postgraduate in Food, Nutrition and Cancer: Prevention and Treatment
- ♦ Master's Degree in Integrative Medicine from CEU University
- ♦ University Expert in Nutrition, Dietetics and Diet Therapy
- ♦ Expert in Vegetarian, Clinical, and Sports Nutrition
- ♦ Expert in the current use of Nutricosmetics and Nutraceuticals in general



Dr. Alarcón Cavero, Teresa

- Biologist Specialist in Microbiology at La Princesa University Hospital
- Head of Group 52 of the Research Institute of the La Princesa Hospital
- Bachelor's Degree in Biological Sciences, specializing in Fundamental Biology from the Complutense University of Madrid
- Master's Degree in Medical Microbiology from the Complutense University of Madrid



Dr. Muñoz Algarra, María

- Head of Patient Safety at the Microbiology Department at Puerta de Hierro Majadahonda University Hospital
- Area Specialist in the Microbiology Unit of Puerta de Hierro Majadahonda University Hospital, Madrid
- Collaborator in the Department of Preventive Medicine and Public Health and Microbiology at the Autonomous University of Madrid
- Doctor in Pharmacy from the Complutense University of Madrid



Dr. López Dosil, Marcos

- Specialist in Microbiology and Parasitology at San Carlos Clinical University Hospital
- Specialist in Microbiology and Parasitology at the Móstoles Hospital
- Master's Degree in Infectious Diseases and Antimicrobial Treatment from the CEU Cardenal Herrera University
- Master's Degree in Tropical and Health Medicine from the Autonomous University of Madrid
- Expert in Tropical Medicine by the Autonomous University Madrid



Mr. Anel Pedroche, Jorge

- Specialist in Microbiology Department of the Puerta de Hierro Majadahonda University Hospital
- Bachelor's Degree in Pharmacy from the Complutense University of Madrid
- Course in Interactive Sessions on Hospital Antibiotherapy by MSD
- Course on Infection Update in the Hematologic Patient by the Puerta de Hierro Hospital
- Attendance at the XXII Congress of the Spanish Society of Infectious Diseases and Clinical Microbiology



Dr. Portero Azorín, María Francisca

- Acting Head of the Microbiology Department at the Puerta de Hierro Majadahonda University Hospital
- Specialist in Microbiology and Clinical Parasitology by the Puerta de Hierro University Hospital
- Doctorate in Medicine from the Autonomous University Madrid
- Postgraduate degree in Clinical Management from the Gaspar Casal Foundation
- Research stay at the Presbyterian Hospital of Pittsburgh through a FISS grant

04

Structure and Content

Thanks to this university program, physiotherapists will have a solid understanding of the composition and function of the skin microbiota, as well as the most common pathologies. The curriculum will delve into issues such as the factors that regulate the type of bacterial flora in the skin, or the structure of the Cutaneous Immune System. Likewise, the syllabus will examine the triggered cutaneous pathologies such as Psoriasis, Acne Vulgaris and Atopic Dermatitis. Therefore, graduates will use this knowledge to optimize skin conditions and promote more effective healing in patients with chronic and even postoperative wounds.





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You will be able to perform skin health assessments through procedures such as sample analysis or the use of advanced diagnostic tools”

Module 1. Skin Microbiota

- 1.1. Skin Physiology
 - 1.1.1. Structure of the Skin: Epidermis, Dermis, and Hypodermis
 - 1.1.2. Functions of the Skin
 - 1.1.3. Microbial Composition of the Skin
- 1.2. Factors that Regulate the Type of Bacterial Flora in the Skin
 - 1.2.1. Sweat Glands, Sebaceous Glands, Desquamation
 - 1.2.2. Factors that Alter the Ecology of the Skin and Its Microbiota
- 1.3. Skin Immune System. Epidermis, Essential Element of Our Defenses
 - 1.3.1. Epidermis, Essential Element of Our Defenses
 - 1.3.2. Elements of the Cutaneous Immune System: Cytosines, Keratinocytes, Dendritic Cells, Lymphocytes, Antimicrobial Peptides
 - 1.3.3. 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
 - 1.4.1. Impaired Barrier Function
- 1.5. Triggered Skin Diseases
 - 1.5.1. Psoriasis (Streptococcus Pyogenes)
 - 1.5.2. Acne Vulgaris
 - 1.5.3. Atopic Dermatitis
 - 1.5.4. Rosacea
- 1.6. Influence of the Use of Probiotics in the Prevention and Treatment of Different Skin Diseases
- 1.7. Current Lines of Research





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This Postgraduate Certificate has a wide range of multimedia resources such as videos and infographics, allowing a more Dynamic learning. Enroll now!”

05

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

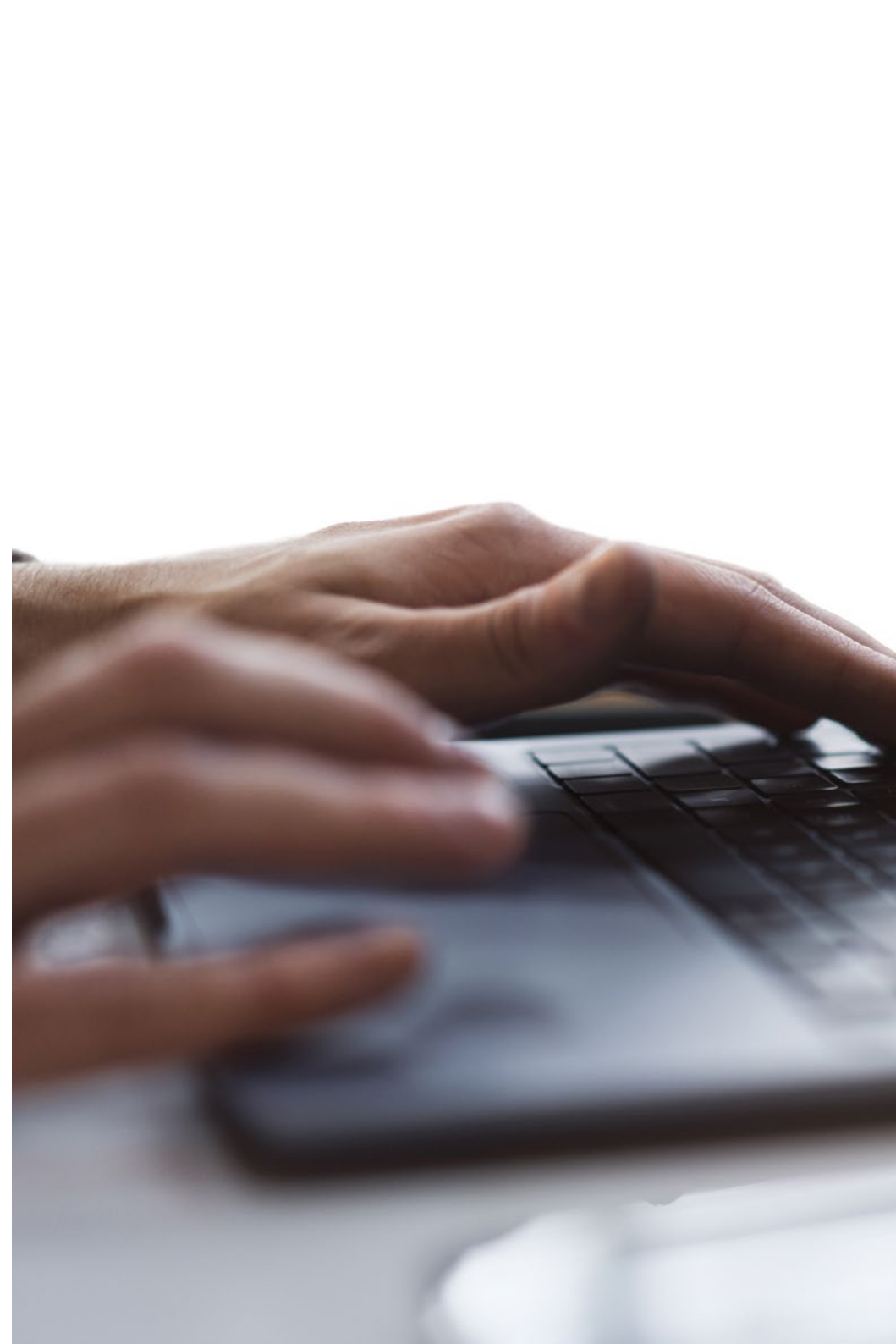
In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

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TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

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.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



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 exclusive educational 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 education.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



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 for 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 Skin Microbiota guarantees, in addition to the most accurate and up-to-date knowledge, access to a Postgraduate Certificate issued by TECH Global University.





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

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

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 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.

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

tech global
university

Postgraduate Certificate Skin Microbiota

- » Modality: online
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Postgraduate Certificate

Skin Microbiota

