

Postgraduate Diploma

Respiratory Microbiota and Allergies





Postgraduate Diploma Respiratory Microbiota and Allergies

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

Website: www.techitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-respiratory-microbiota-allergies

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01

Introduction

The relation between the microbiota and respiratory allergies or asthma is very close. Numerous studies have determined that nasopharyngeal secretions, especially at early ages, play a crucial role in the development of diseases related to this tract in later stages of life. The respiratory tract has a great bacteriological richness, so the therapeutic perspectives that are contemplated in terms of taking advantage of the properties of these organisms are very positive. For this reason, TECH has developed a program that gathers the most exhaustive and innovative information related to the immune system, intolerances, allergies and the microbiota. In this way, specialists will be able to update their clinical practice 100% online and in only 6 months.





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An innovative, dynamic and intensive Postgraduate Diploma with which you will be able to get abreast of all the novelties of the Respiratory Microbiota and its relationship with allergies in a 100% online way and in only 6 months"

The advances that have been made in the field of the Microbiota and its role in human health have determined that the involvement of some microorganisms of systems such as the respiratory or intestinal are fundamental for the prevention or treatment of allergies and intolerances. A clear example of this is the increased risk of suffering some type of atopic dermatitis, rhinitis or asthma after repeated or prolonged consumption of antibiotics at an early age. Therefore, the use of probiotics and prebiotics in the medical field of allergology to strengthen the immune system must be the norm in order to offer patients increasingly effective and efficient alternatives for their health.

And with the goal of bringing to the professionals of this sector the most comprehensive and innovative information related to the Respiratory Microbiota and allergies, TECH and its team of biologists and medical specialists have developed this complete Postgraduate Diploma. It is a rigorous and innovative qualification through which you will be able to immerse yourself in the advances that have been carried out in this field through 450 hours of theoretical, practical and additional content. And it is that they will work with the latest clinical evidence related to the bacteria that invade the respiratory tract and help to prevent and palliate diseases and conditions, as well as to strengthen the immune system.

All this, 100% online and over 6 months in which the graduate will have access to the latest generation Virtual Campus, characterized not only by its compatibility with any device with internet connection, but also by the innovative academic tools it includes. It is, therefore, a flexible, multidisciplinary experience adapted to doctors' needs, thanks to which they will be able to update their knowledge from wherever they want and with a schedule fully adapted to their availability, allowing them to combine their course with their daily practice.

This **Postgraduate Diploma on Respiratory Microbiota and Allergies** contains the most complete and up-to-date scientific program on the market. Its most outstanding features are:

- ♦ The development of case studies presented by experts in Respiratory Microbiota and Allergies.
- ♦ 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 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



Knowing the relationship between the oral microbiota and the respiratory tract, as well as the latest scientific advances that have been made in this field, will allow you to offer a service in line with the current clinical situation"

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If you are looking for an academic experience that allows you to get up-to-date on the factors that regulate the respiratory microbiota, opting for this Postgraduate Diploma is the best option"

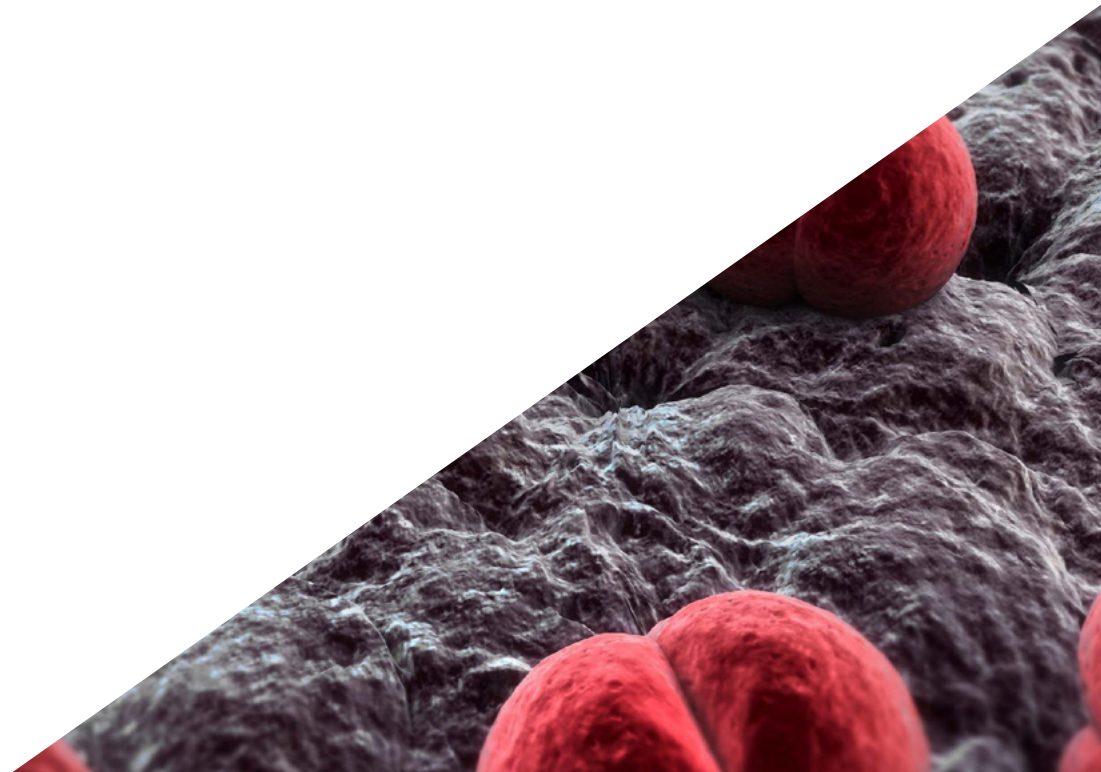
In the Virtual Campus, you will find 450 hours of diverse material for you to contextualize the curriculum information and delve into each of its sections in a personalized way.

You will work with the most comprehensive information related to current lines of research and their future clinical applications.

The program includes in its teaching staff professionals of the sector who pour into this course the experience of their work, as well as recognized specialists from reference 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 immersion 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 countless benefits brought about by the use of the characteristics of the Microbiota as regulatory agents for respiratory diseases and allergies have allowed specialists to offer more therapeutic alternatives to their patients. For that reason, the objective of this Postgraduate Diploma is to provide the graduate with the latest information related to this field, so that they can improve their knowledge in a guaranteed way and based on the latest scientific advances carried out in relation to the oral Microbiota and the respiratory tract.



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You will be able to know the best strategies related to the Microbiota to prevent caries, halitosis or periodontal, gingival and peri-implant diseases”



General Objectives

- ♦ Offer a complete and wide vision of the current situation in the area of the Human Microbiota, in its broadest sense, the importance of the balance of this Microbiota as a direct effect on 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, the prevention of diseases and as a support to other medical treatments
- ♦ 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 on its interaction with the microbiota and how it may be influencing it
- ♦ Encouraging professional stimulus, through continued specialization and research



You will review primary and secondary organ characteristics, as well as their involvement in the occurrence of allergies and intolerances, so you can get up to date on the advances that have been made in this field"





Specific Objectives

Module 1. Oral Microbiota and Respiratory Tract

- ♦ Study the mechanisms by virtue of which Probiotics are postulated as preventive in the formation of dental caries and periodontal diseases
- ♦ Acquire an in-depth knowledge of all the oral and respiratory structure and the ecosystems that live in them, seeing how an alteration of these ecosystems has a direct relationship with many associated pathologies

Module 2. Microbiota and Immune System

- ♦ Delve into the bidirectional relationship between Microbiota and Neuroimmunological System and study in depth the intestine-microbiota-brain axis and all the pathologies that are generated in its imbalance
- ♦ Analyze the role of nutrition and lifestyle and their interaction with the immune system and Microbiota

Module 3. Relationship between Intolerances/Allergies and Microbiota

- ♦ Know how a negative modulation in the microbiota can favor the appearance of food intolerances and allergies
- ♦ Deepen in the changes in the microbiota in patients with food exclusion diets such as gluten

03

Course Management

The teaching staff of this Postgraduate Diploma is formed by professionals in the field of Medicine and Biology with extensive experience in the field of the Microbiota and the multiple clinical benefits of its potentiation. Specifically, they have studied the therapeutic characteristics of its development in relation to respiratory diseases, allergies and intolerances. In this way, specialists will be able to keep up to date with the best, acquiring exhaustive knowledge about their strategies for success and the positive changes that the application of certain treatments with microorganisms can generate in patients.





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The teaching team has actively participated in the design of the syllabus, so that the graduate who accesses this program will have first-hand knowledge of the latest advances that have been made in this field"

Guest Directors



Dr. Sánchez Romero, María Isabel

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



Dr. Portero Azorín, MARÍA Francisca

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



Dr. Alarcón Cavero, Teresa

- ♦ Biologist Specialist in Microbiology, Princesa University Hospital
- ♦ Head of Group 52 of the Research Institute of the La Princesa Hospital
- ♦ Degree in Biological Sciences with a major 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 of the Puerta de Hierro Majadahonda University Hospital
- ♦ Area Specialist in the Microbiology Department of the Puerta de Hierro Majadahonda University Hospital, Madrid
- ♦ Collaborator Department of Preventive Medicine and Public Health and Microbiology Autonomous University of Madrid
- ♦ Doctorate in Pharmacy from the Complutense University of Madrid



Dr. López Dosil, Marcos

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



Anel Pedroche, Jorge

- ♦ Facultative Area Specialist. Microbiology Department, Puerta de Hierro University Hospital, Majadahonda, Spain
- ♦ Degree in Pharmacy from the Complutense University of Madrid
- ♦ Course in Interactive Sessions on Hospital Antibiotherapy by MSD
- ♦ Updating course on infection in hematologic patients by Puerta del Hierro Hospital
- ♦ Attendance at the XXII Congress of the Spanish Society of Infectious Diseases and Clinical Microbiology

Management



Dr. Fernández Montalvo, María Ángeles

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

Professors

Dr. López Martínez, Rocío

- ♦ Physician in the area of Immunology at the Vall d'Hebron Hospital.
- ♦ Immunology Physician at the Vall d'Hebron Hospital.
- ♦ Internal Biologist in Immunology at Central University Hospital of Asturias.
- ♦ Master in Biostatistics and Bioinformatics, Universidad Oberta of Catalunya.

Ms. Bueno García, Eva

- ♦ Predoctoral researcher in Immunosenescence at the Immunology Service of the Central University Hospital of Asturias (HUCA)
- ♦ Degree in Biology from the University of Oviedo
- ♦ Master's Degree in Biomedicine and Molecular Oncology from the University of Oviedo
- ♦ Molecular biology and immunology courses

Dr. Uberos, José

- ♦ Head of section in the Neonatology area of the San Cecilio Clinical Hospital of Granada
- ♦ Specialist in Pediatrics and Child Care
- ♦ Associate Professor of Pediatrics, University of Granada
- ♦ Vocal Bioethics Research Committee of the Province of Granada (Spain)
- ♦ Coeditor of the Signs and Symptoms Journal
- ♦ Professor Antonio Galdo Award. Society of Pediatrics of Eastern Andalucía
- ♦ Editor of the Journal of the Pediatric Society of Eastern Andalusia (Bol. SPAO)
- ♦ Doctor of Medicine and Surgery
- ♦ Degree in Medicine from the University of Santiago de Compostela
- ♦ Member of the Board of the Pediatric Society of Eastern Andalusia

Dr. Verdú López, Patricia

- ♦ Medical Specialist in Allergology at the Beata María Ana Hospital of Hermanas Hospitalarias
- ♦ Physician specializing in Allergology at Inmunomet Health and Integral Wellness Center
- ♦ Research physician in Allergology at San Carlos Hospital
- ♦ Specialist in Allergology at the University Hospital Dr. Negrín in Las Palmas of Gran Canaria
- ♦ Degree in Medicine from the University of Oviedo
- ♦ Master's Degree in Aesthetics and Antiaging Medicine at Complutense La University of Madrid

Dr. Rioseras de Bustos, Beatriz

- ♦ Microbiologist and renowned researcher
- ♦ Resident in immunology at HUCA
- ♦ Member of the Biotechnology of Nutraceuticals and Bioactive Compounds Research Group (Bionuc) of the University of Oviedo
- ♦ Member of the Microbiology Area of the Department of Functional Biology
- ♦ Residency in the Southern Denmark University
- ♦ Doctorate in Microbiology from the University of Oviedo
- ♦ Master's Degree in Neuroscience Research from the University of Oviedo

Dr. Gonzalez Rodríguez, Silvia Pilar

- ♦ Deputy Medical Director, Research Coordinator and Clinical Chief of the Menopause and Osteoporosis Unit at Gabinete Médico Velázquez
- ♦ Specialist in Gynecology and Obstetrics at HM Gabinete Velázquez
- ♦ Medical Expert at Bypass Comunicación en Salud, SL
- ♦ Key Opinion Leader of several international pharmaceutical laboratories
- ♦ Doctor in Medicine and Surgery from the University of Alcalá de Henares, specializing in Gynecology
- ♦ Specialist in Mastology by the Autonomous University of Madrid
- ♦ Master's Degree in Sexual Orientation and Therapy from the Sexological Society of Madrid
- ♦ Master's Degree in Climacteric and Menopause from the International Menopause Society
- ♦ Postgraduate Diploma in Epidemiology and New Applied Technologies from the UNED (Spanish Distance Learning University)
- ♦ University Diploma in Research Methodology from the Foundation for the Training of the Medical Association and the National School of Health of the Carlos III Health Institute

Ms. Rodríguez Fernández, Carolina

- ♦ Biotechnology Researcher at Adknoma Health Research
- ♦ Researcher at Adknoma Health Research
- ♦ Master in Clinical Trials Monitoring by ESAME Pharmaceutical Business School
- ♦ Master's Degree in Food Biotechnology from the University of Oviedo
- ♦ University Expert in Digital Teaching in Medicine and Health by CEU Cardenal Herrera University

Dr. Lombó Burgos, Felipe

- ♦ PhD in Biology
- ♦ Head of the BIONUC Research Group, University of Oviedo
- ♦ Former Director of the Research Support Area of the AEI Project
- ♦ Member of the Microbiology Area of the University of Oviedo
- ♦ Co-author of the research Biocidal nanoporous membranes with inhibitory activity of biofilm formation at critical points in the production process of the dairy industry
- ♦ Head of the study on 100% natural acorn-fed ham against inflammatory bowel diseases
- ♦ Speaker III Congress of Industrial Microbiology and Microbial Biotechnology

Dr. Méndez García, Celia

- ♦ Biomedical Researcher at Novartis Laboratories in Boston, USA
- ♦ Doctorate in Microbiology from the University of Oviedo
- ♦ Member of the North American Society for Microbiology

Dr. Alonso Arias, Rebeca

- ♦ Director of the Immunosenescence research group of the HUCA Immunology Service
- ♦ Specialist Immunology Physician at the Central University Hospital of Asturias
- ♦ Numerous publications in international scientific journals
- ♦ Research work on the association between the microbiota and the immune system
- ♦ 1st National Award for Research in Sports Medicine, 2 occasions

Dr. Álvarez García, Verónica

- ♦ Assistant Physician of the Digestive Area at the Río Hortega University Hospital
- ♦ Specialist in Digestive System at the Central Hospital of Asturias
- ♦ Speaker at the XLVII Congress SCLECARTO
- ♦ Degree in Medicine and Surgery
- ♦ Digestive System Specialist

Dr. Gabaldon Estevani, Toni

- ♦ IRB and BSC senior group leader
- ♦ Co-founder and Scientific Advisor (CSO) of Microomics SL
- ♦ ICREA Research Professor and Group Leader of the Comparative Genomics Laboratory
- ♦ Doctor of Medical Sciences, Radboud University Nijmegen
- ♦ Corresponding Member of the Royal National Academy of Pharmacy of Spain
- ♦ Member of the Spanish Young Academy

Dr. Narbona López, Eduardo

- ♦ Speciality Neonatal Unit, San Cecilio University Hospital
- ♦ Advisor to the Department of Pediatrics, University of Granada.
- ♦ Member of: Pediatric Society of Western Andalusia and Extremadura, Andalusian Association of Primary Care Pediatrics.

Dr. López Vázquez, Antonio

- ♦ Immunology at the Central University Hospital of Asturias
- ♦ Area Specialist in Immunology, Central University Hospital of Asturias, Spain.
- ♦ Collaborator of the Carlos III Health Institute
- ♦ Advisor of Aspen Medical
- ♦ Doctor of Medicine, University of Oviedo.

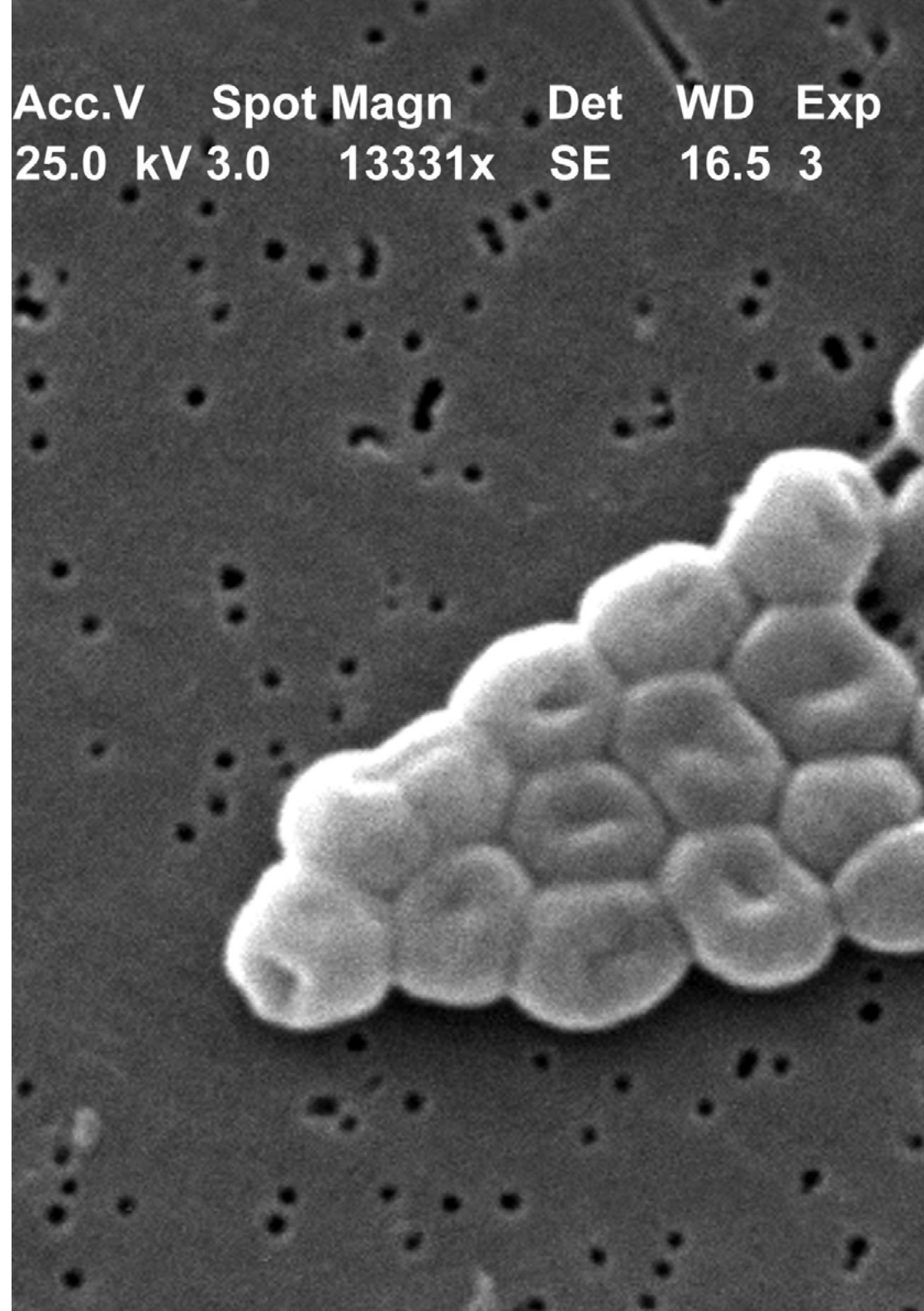
Dr. Losa Domínguez, Fernando

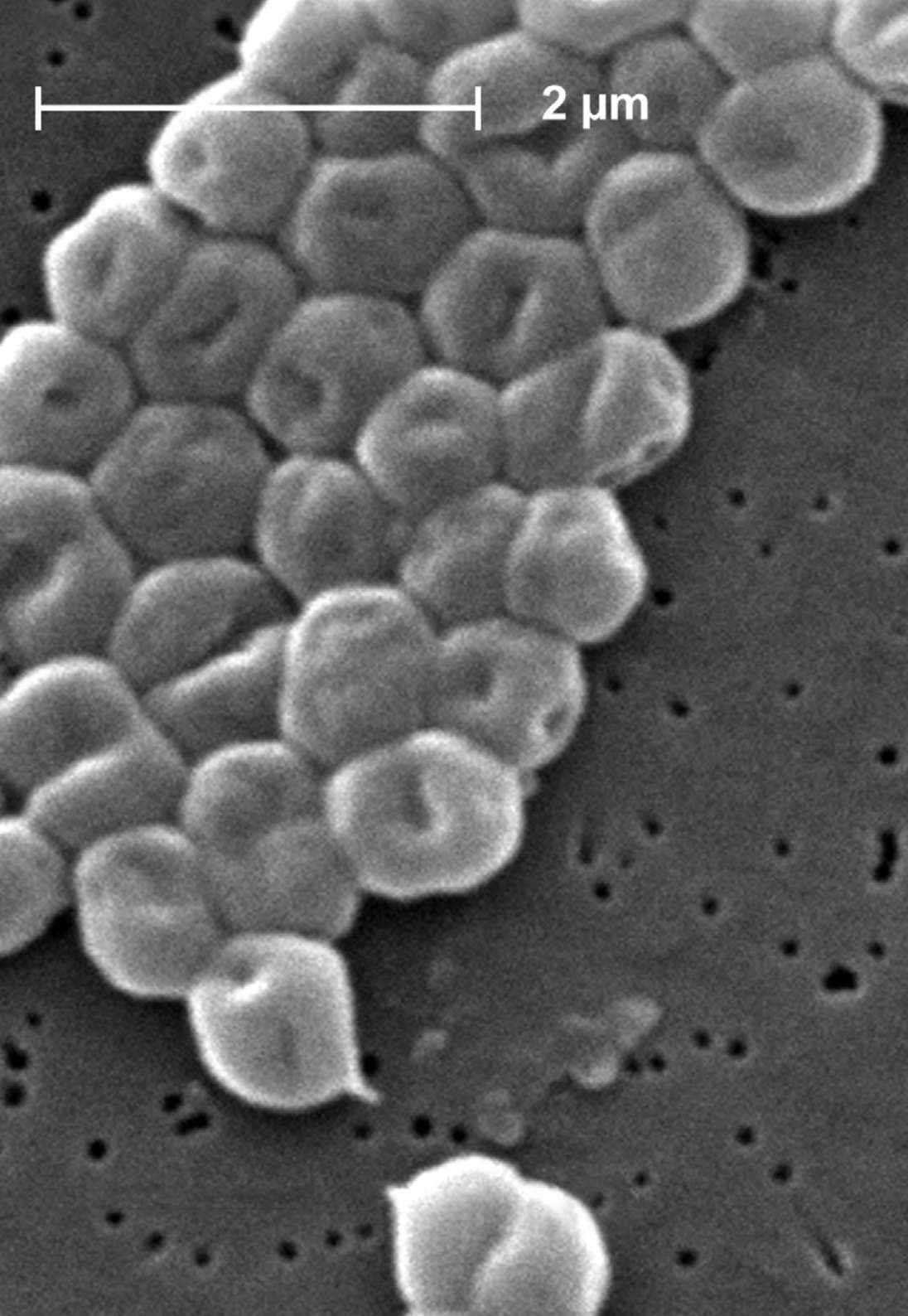
- ♦ Gynecologist at the Sagrada Familia Clinic of HM Hospitals
- ♦ Doctor in private practice in Obstetrics and Gynecology in Barcelona.
- ♦ Expert in Gynecoesthetics by the Autonomous University of Barcelona.
- ♦ Member of: Spanish Association for the Study of Menopause, Spanish Society of Phytotherapeutic Gynecology, Spanish Society of Obstetrics and Gynecology, Board of the Menopause Section of the Catalan Society of Obstetrics and Gynecology.

Dr. López López, Aranzazu

- ♦ Specialist in Biological Sciences Researcher
- ♦ Researcher at Fisabio Foundation
- ♦ Assistant Researcher at the University of the Balearic Islands
- ♦ PhD in Biological Sciences from the University of the Balearic Islands.

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Ms. Suárez Rodríguez, Marta

- ♦ Gynecologist specialized in Senology and Breast Pathology
- ♦ Researcher and University Professor
- ♦ PhD in Medicine and Surgery from the Complutense University of Madrid.
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Master's Degree in Senology and Breast Pathology from the Autonomous University of Barcelona

Dr. Fernández Madera, Juan Jesus

- ♦ Allergologist at HUCA
- ♦ Former Head of the Allergology Unit, Monte Naranco Hospital, Oviedo.
- ♦ Allergology Service, Central University Hospital of Asturias.
- ♦ Member of: Alergonorte Board of Directors, SEAIC Rhinoconjunctivitis Scientific Committee, Medicinatv.com Advisory Committee



Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

04

Structure and Content

This Postgraduate Diploma in Respiratory Microbiota and Allergies includes 450 hours of content, which are distributed in the syllabus, in real clinical cases and in additional high quality material presented in different formats. Therefore, students will be able to obtain a certain degree of specialization from each module based on their needs and requirements. In addition, this 100% online program will allow you to access your course without limits or schedules, and from any device with internet connection.



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The use of the Relearning methodology in the development of this program will allow you to improve your knowledge in a natural way, without having to invest extra hours in memorizing”

Module 1. Oral Microbiota and Respiratory Tract

- 1.1. Structure and Oral Ecosystems
 - 1.1.1. Main oral ecosystems
 - 1.1.2. Key Points
- 1.2. Main Ecosystems that are Found in the Oral Cavity. Characteristics and Composition of Each of Them. Nostrils, Nasopharynx and Oropharynx
 - 1.2.1. Anatomical and histological features of the oral cavity
 - 1.2.2. Nasal Fossa
 - 1.2.3. Nasopharynx and oropharynx
- 1.3. Alterations of the Oral Microbial Ecosystem: Oral Dysbiosis. Relationship with Different Oral Disease States
 - 1.3.1. Characteristics of Oral Microbiota
 - 1.3.2. Oral diseases
 - 1.3.3. Recommended measures to reduce dysbiotic processes
- 1.4. Influence of External Agents in Oral Eubiosis and Dysbiosis. Hygiene
 - 1.4.1. Influence of External Agents in Oral Eubiosis and Dysbiosis.
 - 1.4.2. Oral symbiosis and dysbiosis
 - 1.4.3. Predisposing factors to oral dysbiosis
- 1.5. Structure of the Respiratory Tract and Composition of the Microbiota and Microbiome
 - 1.5.1. Upper Respiratory Routes
 - 1.5.2. Lower Respiratory Routes
- 1.6. Factors that Regulate the Respiratory Microbiota
 - 1.6.1. Metagenomics
 - 1.6.2. Hypothesis of Hygiene
 - 1.6.3. Viroma
 - 1.6.4. Microbiome or fungiome
 - 1.6.5. Probiotics in bronchial asthma
 - 1.6.6. Diet
 - 1.6.7. Prebiotics
 - 1.6.8. Bacterial translocation





- 1.7. Alteration of the Respiratory Tract Microbiota and its Relationship with Different Respiratory Tract Diseases
 - 1.7.1. Pathogenesis and clinical manifestations of upper respiratory tract infections
 - 1.7.2. Pathogenesis and clinical manifestations of upper respiratory tract infections
- 1.8. Therapeutic Manipulation of the Microbiome of the Oral Cavity in Prevention and Treatment of Related Diseases
 - 1.8.1. Definition of Probiotics, Prebiotics, and Symbiotics
 - 1.8.2. Application for Oral Cavity Probiotic..
 - 1.8.3. Probiotic strains used in the mouth
 - 1.8.4. Action in relation to oral diseases
- 1.9. Therapeutic Manipulation of the Microbiome of the Respiratory Tract in Prevention and Treatment of Related Diseases
 - 1.9.1. Efficacy of probiotics for the treatment of respiratory tract disease: GI-Respiratory axis.
 - 1.9.2. Use of probiotics for the treatment of rhinosinusitis
 - 1.9.3. Use of probiotics for the treatment of Otitis
 - 1.9.4. Use of probiotics for the treatment of rhinosinusitis
 - 1.9.5. Use of probiotics in rhinitis and allergic bronchial asthma
 - 1.9.6. Probiotics to prevent lower respiratory tract infections
 - 1.9.7. Studies with lactobacilli
 - 1.9.8. Studies with bifidobacteria
- 1.10. Current Lines of Research and Clinical Applications
 - 1.10.1. Transfer of fecal material
 - 1.10.2. Extraction of Nucleic Acids
 - 1.10.3. Sequencing Methods
 - 1.10.4. Strategies for Microbiota Characterization.
 - 1.10.5. Metataxonomy
 - 1.10.6. Metataxonomy of the Active Fraction
 - 1.10.7. Metagenomics
 - 1.10.8. Metabolomics

Module 2. Microbiota and Immune System

- 2.1. Immune System Physiology
 - 2.1.1. Immune System Components
 - 2.1.1.1. Lymphoid Tissue
 - 2.1.1.2. Immune Cells
 - 2.1.1.3. Chemical Systems
 - 2.1.2. Organs Involved in Immunity
 - 2.1.2.1. Primary Organs.
 - 2.1.2.2. Secondary Organs.
 - 2.1.3. Innate, Non-Specific, or Natural Immunity
 - 2.1.4. Acquired, Adaptive, or Specific Immunity
- 2.2. Nutrition and Lifestyle
- 2.3. Functional Foods (Probiotics and Prebiotics), Nutraceuticals, and Immune System
 - 2.3.1. Probiotics, Prebiotics, and Symbiotics
 - 2.3.2. Nutraceuticals and Functional Foods
- 2.4. Bidirectional Relationship between Microbiota and Neuroimmunoendocrine System
- 2.5. Microbiota, Immunity and Nervous System Disorders
- 2.6. The Gut-Microbiota-Brain Axis
- 2.7. Current Lines of Research





Module 3. Relationship between Intolerances/Allergies and Microbiota

- 3.1. Microbiota changes in Patients on Food Exclusion Diets
 - 3.1.1. Eosinophilic Esophagitis (EoE)
- 3.2. Changes in the Microbiota in Patients with Food Exclusion Diets: Intolerance to Dairy Products (Lactose, Milk Proteins: Caseins, Albumins, Others)
 - 3.2.1. Lactose Intolerance
 - 3.2.2. Intolerant to Lactic Proteins: Caseins, Albumins, etc.
 - 3.2.3. People Allergic to Milk
- 3.3. Alteration and Recovery of the Intestinal Microbiota in Patients with Gluten Intolerance and Celiac Disease
 - 3.3.1. Alteration of the Intestinal Microbiota in Patients with Gluten Intolerance
 - 3.3.2. Alteration of the Intestinal Microbiota in Celiac Patients
 - 3.3.3. Role of Probiotics and Prebiotics in the Recovery of the Microbiota in Gluten Intolerant and Coeliacs
- 3.4. Microbiota and Biogenic Amines
- 3.5. Current Lines of Research

05

Methodology

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

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



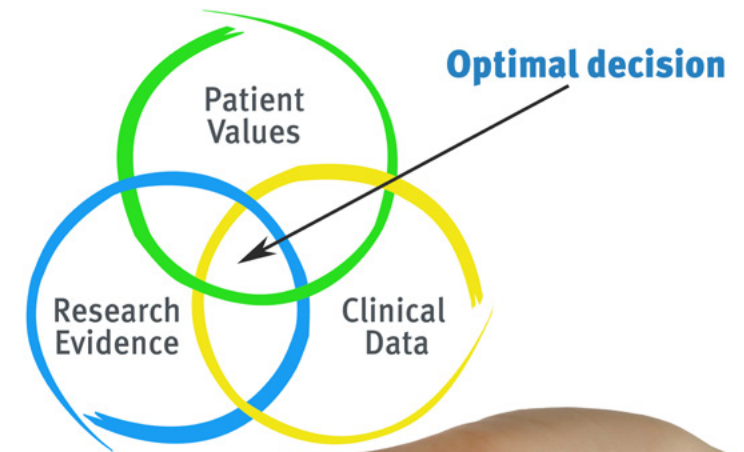
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Discover Relearning, a system that abandons conventional linear learning to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization”

At TECH, we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a “case”, an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician’s professional practice.

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method.

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess 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

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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 adapted in 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 assess and re-assess 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

This Postgraduate Diploma in Respiratory Microbiota and Allergies guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 Diploma in Respiratory Microbiota and Allergies** 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 Respiratory Microbiota and Allergies**

Modality: **online**

Duration: **6 months**

Accreditation: **18 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.

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



Postgraduate Diploma
Respiratory Microbiota
and Allergies

- » Modality: online
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Postgraduate Diploma

Respiratory Microbiota and Allergies

