

Postgraduate Certificate

Oral and Respiratory Microbiota





Postgraduate Certificate Oral and Respiratory Microbiota

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 8 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicina/curso-universitario/oral-respiratory-microbiota

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01

Introduction

One of the Microbiomes most studied by the scientific community is the Oral and Respiratory Microbiota. Not in vain, these microorganisms are essential for Oral Health and for the prevention of respiratory diseases. Moreover, their imbalance can lead to the appearance of pathological processes such as caries, gingivitis, periodontitis and various respiratory diseases. Therefore, this program is an essential preparation to gain knowledge of the microbial ecosystems of the oral cavity and respiratory tract. During the academic course, the structure and composition of oral ecosystems, dysbiotic alterations or the influence of external agents in Eubiosis and Oral Dysbiosis will be addressed. All this and more, in only 200 hours and online.



“

*Consolidate your update in
the modulation of the Oral and
Respiratory Microbiota with TECH”*

The Oral and Respiratory Microbiota is a topic of great relevance nowadays due to its implication in multiple pathological processes, as well as in the maintenance of the individual's health. Specifically, the Oral Microbiota is composed of more than 700 different bacterial species that coexist in a delicate balance with the host, and are involved in processes such as digestion, protection against pathogens and regulation of the immune system. On the other hand, the Respiratory Microbiota is fundamental in the maintenance of lung health, immune response and protection against respiratory infections.

For this reason, the Postgraduate Certificate will allow to approach in depth the most relevant aspects of the Oral and Respiratory Microbiota in order to favor the Microbiome of the patients in this region of the body. Thus, the program is aimed at medical professionals who wish to update their knowledge in this field and enhance their practical skills for the investigation and diagnosis of diseases related to these microorganisms.

The program consists of topics that address the key concepts of the Oral and Respiratory Microbiota, its role in health and disease, as well as the most commonly used research techniques for its study. Additionally, specific aspects are discussed such as its relationship with periodontal diseases, dental Caries, or obstructive pulmonary disease, among others.

Likewise, the pedagogical methodology of the Postgraduate Certificate is based on *Relearning*, which means that the student will assimilate the concepts more quickly thanks to the dynamism of the study plan. Taught 100% online, the program also allows students to organize academic resources according to their needs and time availability.

On the other hand, the academic itinerary integrates an exclusive and intensive *Masterclass*

which will be given by a specialized International Guest Director. Therefore, graduates have an unparalleled academic opportunity to consolidate their competencies in this complex field.

This **Postgraduate Certificate in Oral and Respiratory Microbiota** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ Development of case studies presented by experts in Oral and Respiratory 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 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



*Expand your professional skills in
Human Microbiota research thanks to
the Masterclass of this TECH"*



Analyze the Pathogenesis and Clinical Pathogenesis of respiratory tract infections through self-assessment exercises, case studies or video summaries"

The program's teaching staff includes professionals from the sector 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 and experienced experts.

Become an expert in the development of strategies for the use of probiotics and prebiotics in the oral cavity.

Determine the complex relationship of the respiratory tract Microbiota with the different diseases of the respiratory tract.



02 Objectives

The main objective of the Postgraduate Certificate is to provide enrollees with the high-level preparation they are looking for in Oral and Respiratory Microbiota. In this way, students will delve into their relationship with health and disease and the clinical implications of this knowledge in medical practice. Through this course, students will develop the necessary competences to approach the complexity of these microorganisms in order to outline the most effective medical strategies for their modulation based on current scientific evidence.



“

Gain a comprehensive view of the oral and respiratory structure and the ecosystems that live within it by achieving these objectives"



General Objectives

- ♦ To offer a complete and wide 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 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 of autoimmune nature, or its relationship with immune system dysregulation, disease prevention and as a support to other medical treatments, is 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 pathology, but also looking at its interaction with the microbiota and how it may be influencing it
- ♦ Encourage professional stimulation through continued specialization and research





Specific Objectives

- ♦ 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



It's time to improve all your career prospects with the latest strategies to prevent Oral and Respiratory Dysbiosis"

03

Course Management

The teaching team of the Postgraduate Certificate is made up of a group of professionals with extensive experience in the field of Oral and Respiratory Microbiology. They are responsible for guaranteeing the most rigorous and updated preparation, based on the most recent scientific research. Integrated by researchers, medical specialists and other experts in Microbiology, this faculty has included in the contents all the keys that students need to excel in their daily practice acting on these microorganisms.



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Launch your career in Medicine by applying to your daily practice the keys to effectively modulate the Oral and Respiratory 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 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 Exeliom 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"

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



Ms. 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. 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. 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. Gonzalez Rodríguez, Silvia Pilar

- ♦ Medical Subdirector, Research Coordinator and Clinical Chief of the Menopause and Osteoporosis Unit at the Velázquez Medical Cabinet
- ♦ 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

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. 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

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

- ◆ 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

- ◆ 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

- ◆ 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. Uberos, José

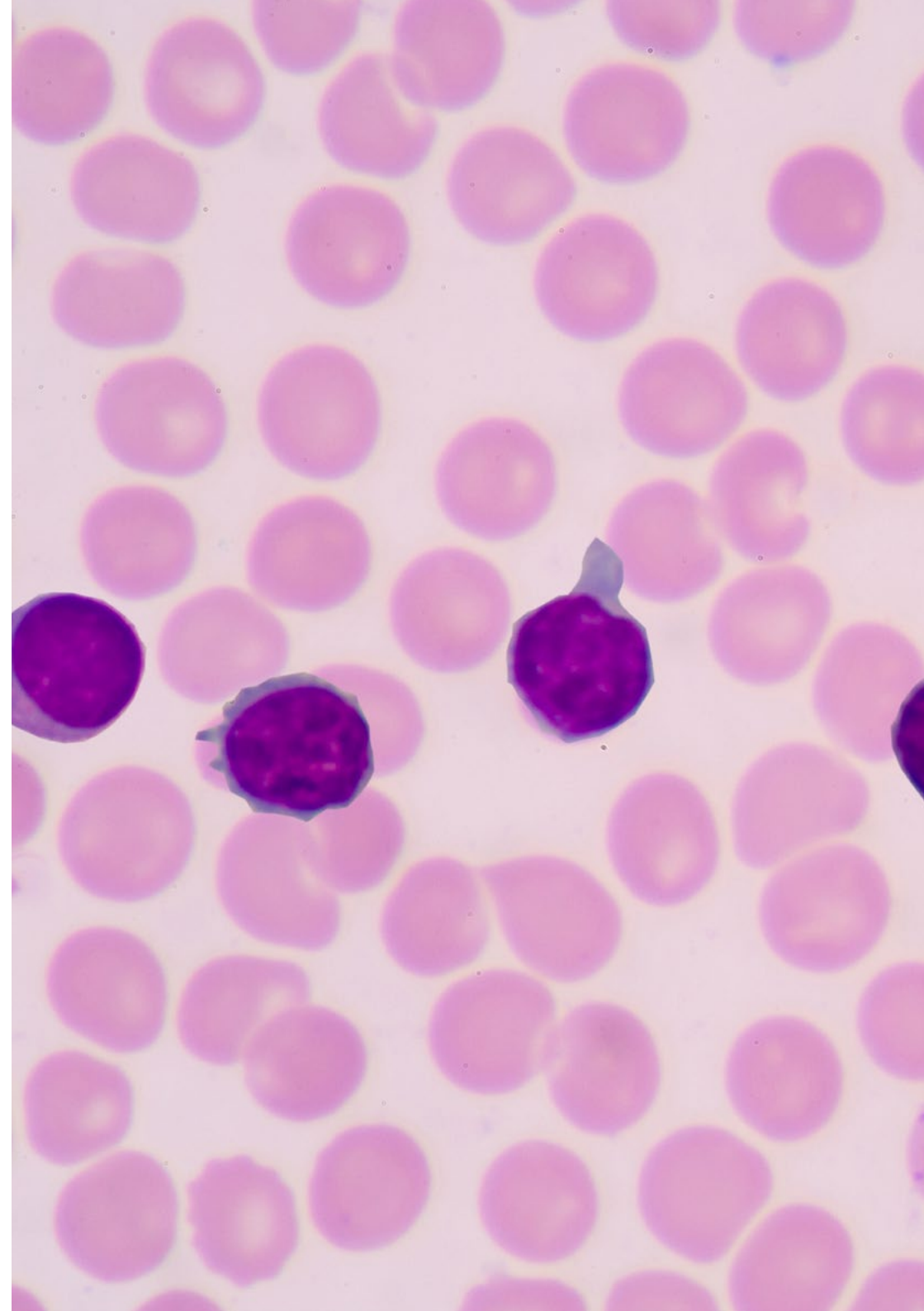
- ♦ Head of section in the Neonatology area of the San Cecilio Clinical Hospital of Granada.
- ♦ Specialist in Pediatrics and Child Care
- ♦ Associate Professor of Pediatrics, University of Granada
- ♦ Vocal Bioethics Research Committee of the Province of Granada (Spain)
- ♦ Coeditor of the Signs and 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.

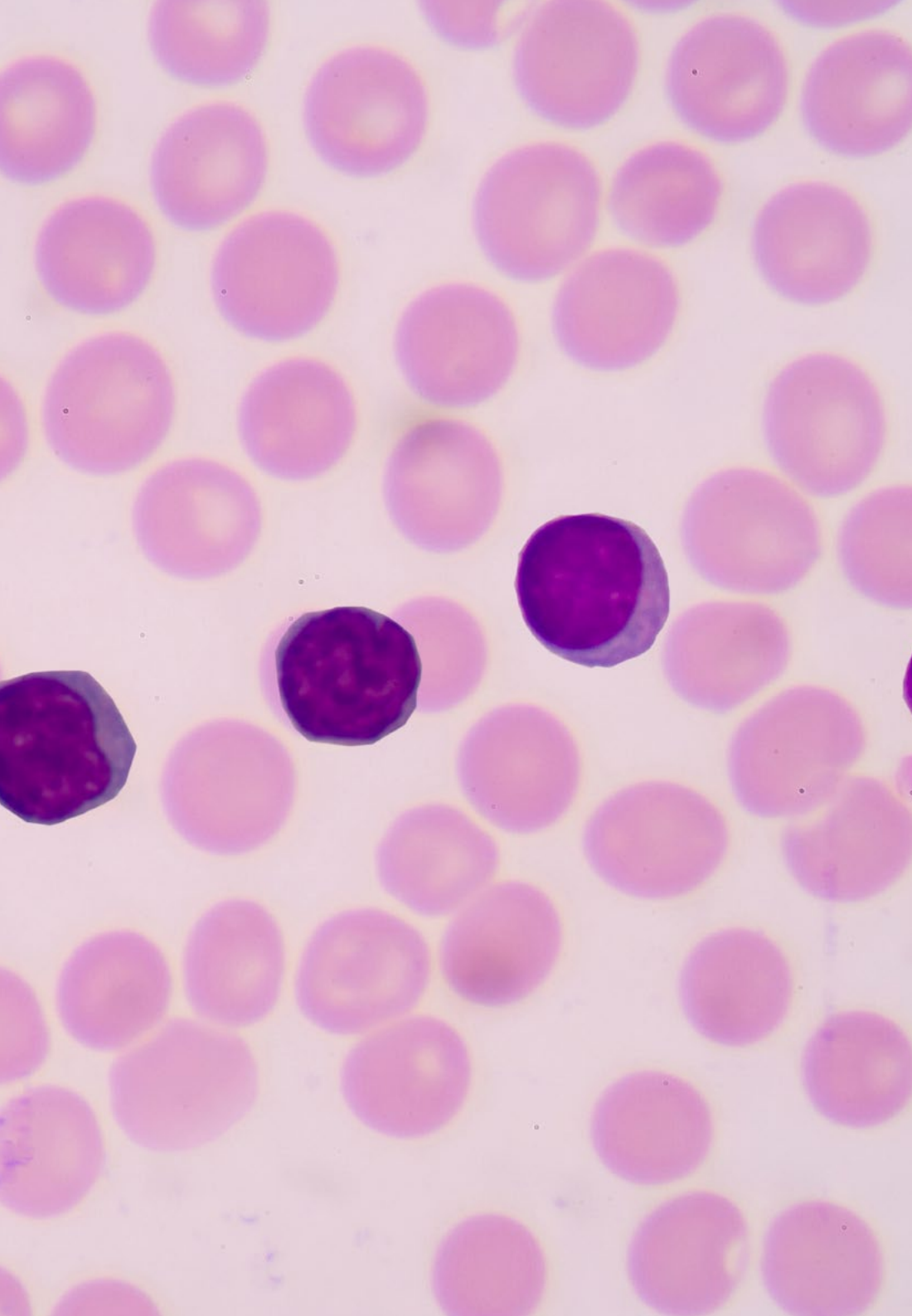
Dr. López Martínez, Rocío

- ♦ 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. 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. 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 and Medicinatv.com Advisory Committee.

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. 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.

04

Structure and Content

With only 200 hours of academic coursework, the Postgraduate Certificate has a highly flexible content structure, allowing students to organize the academic resources according to their needs and obligations. Additionally, with *Relearning* as a methodological substrate, students will internalize all the concepts more quickly, for which they will consult dynamic videos in detail, interactive diagrams, complementary readings or case studies.



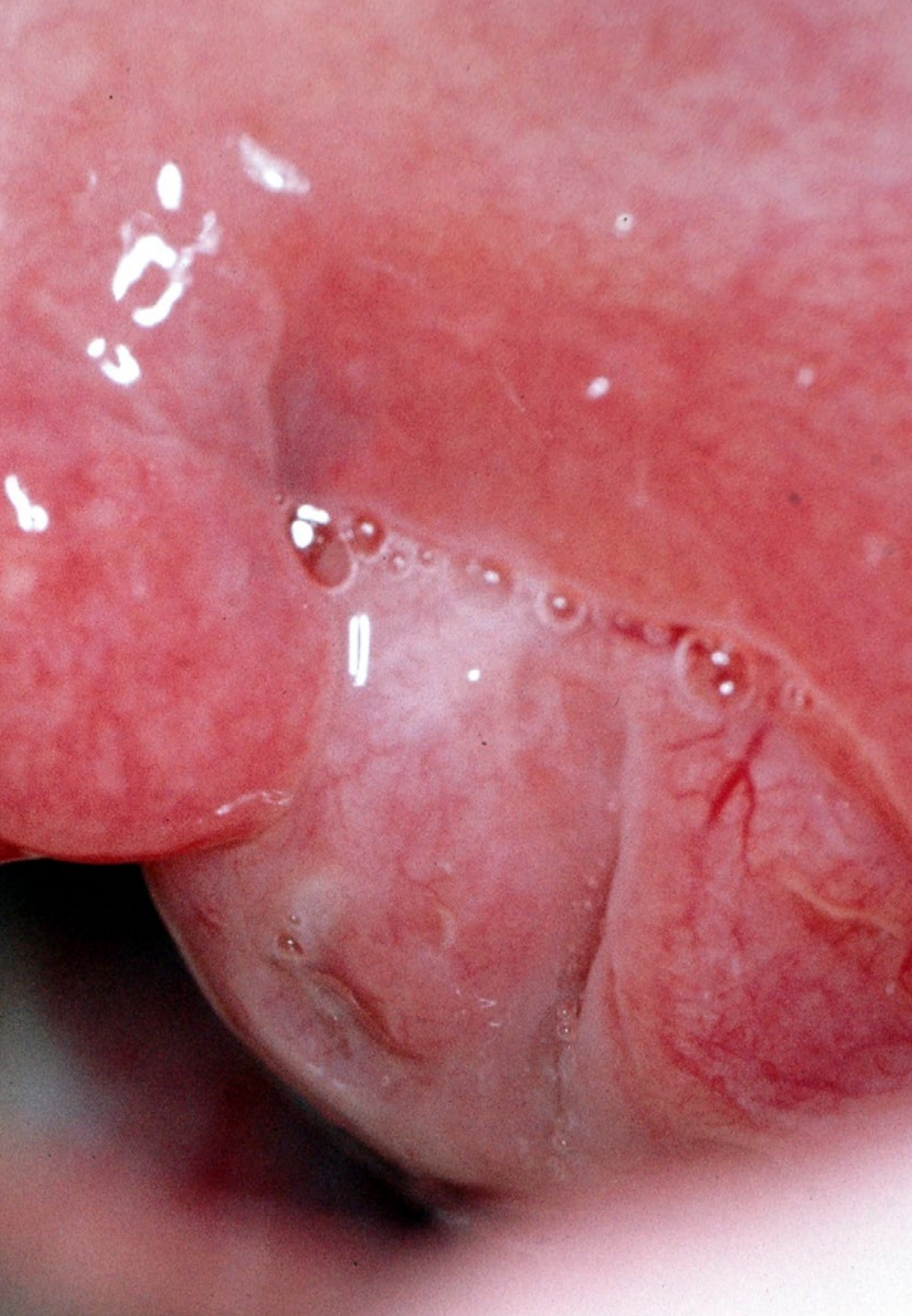
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Take the opportunity to enroll in the program with the most complete syllabus on Oral and Respiratory Microbiota”

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 Lower 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 Upper Respiratory Infections
 - 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

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.



“

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.

“

*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.

“*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.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



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

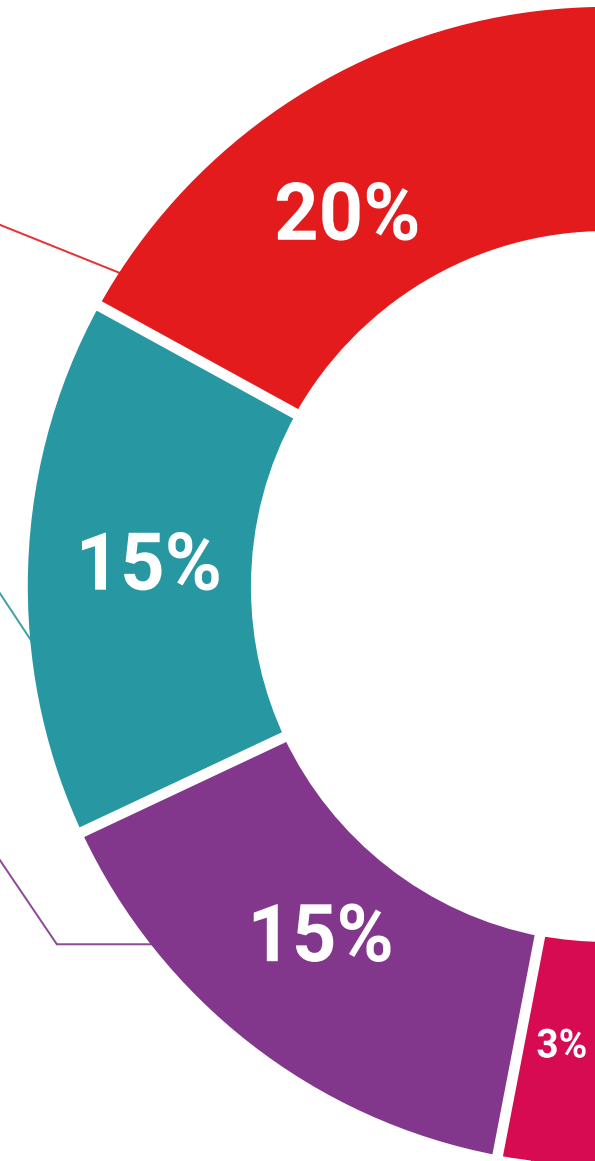
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

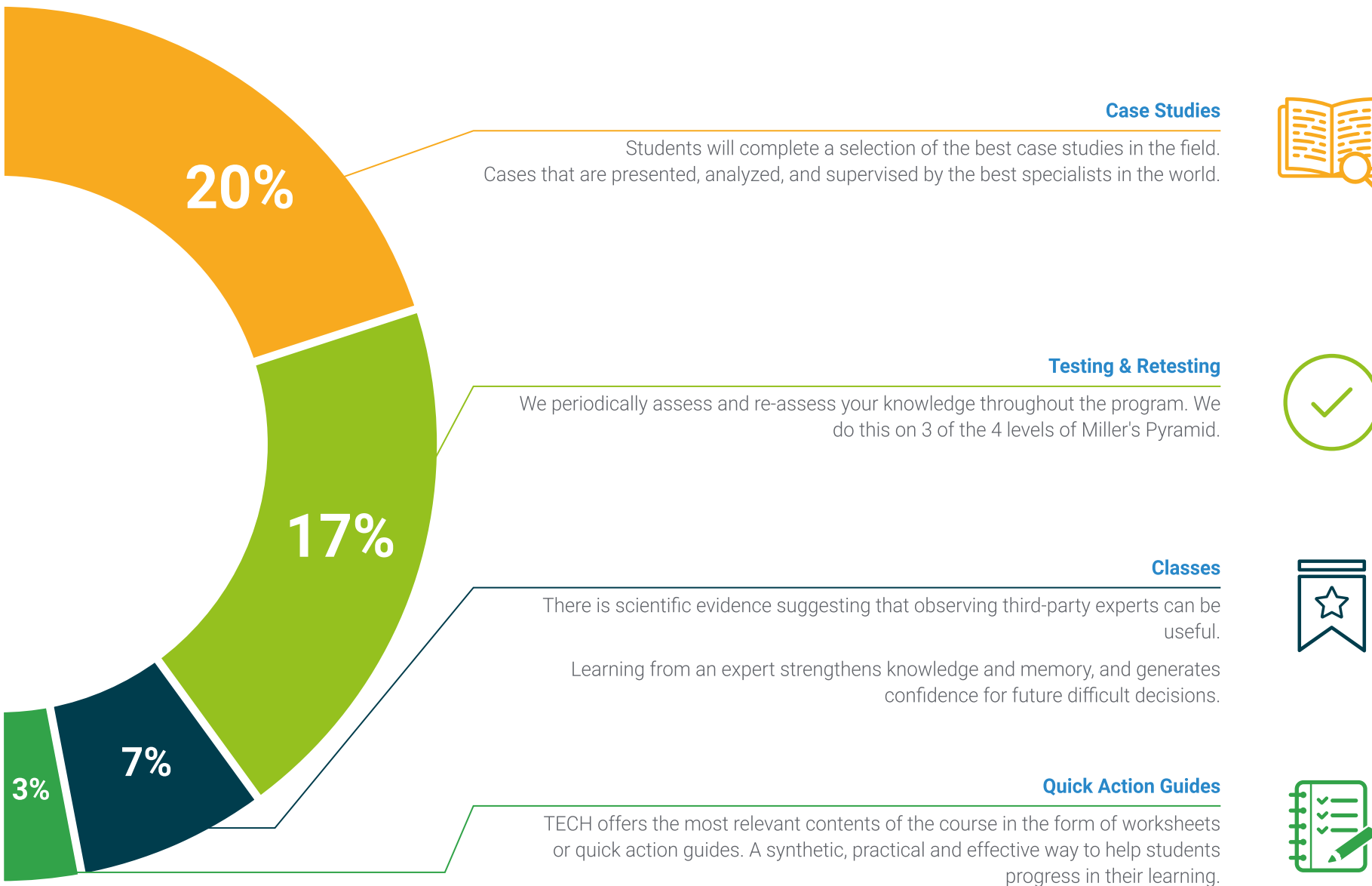
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





06 Certificate

The Postgraduate Certificate in Oral and Respiratory Microbiota guarantees, in addition to the most accurate and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



“

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

This program will allow you to obtain a **Postgraduate Certificate in Oral and Respiratory 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 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 Oral and Respiratory Microbiota**

Modality: **online**

Duration: **6 weeks**

Accreditation: **8 ECTS**





Postgraduate Certificate
Oral and Respiratory
Microbiota

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 8 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate

Oral and Respiratory Microbiota