Postgraduate Certificate

Cutaneous Dysbiosis or Alterations of the Microbiome: Bacteria and Fungi

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Postgraduate Certificate

Cutaneous Dysbiosis or Alterations of the Microbiome: Bacteria and Fungi

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/pk/veterinary-medicine/postgraduate-certificate/cutaneous-dysbiosis-alterations-microbiome-bacteria-fungi

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01

Introduction

This prestigious program addresses three of the most relevant pathologies of pet dermatology. These are pyodermas, dermatoses caused by fungi and dermatoses caused by protozoa, among which we highlight leishmaniasis, a very important disease in many geographical areas.

A unique opportunity to specializ and stand out in professional field in high demand.

Veterinarians must continue their training to adapt to new developments in this field”

The skin, along with its characteristics, is considered to be an active organ in the induction and maintenance of the immunological response. Cutaneous microbiota also contribute in a very important way to the defensive mechanisms of the skin.

This program covers all these mechanisms and specifies the resident and transitory organisms of the skin.

Dermatology is possibly the most frequently encountered specialty within pet veterinary medicine in daily clinical practise. Because of this, and taking into account its importance, this Postgraduate Certificate has been developed by a leading veterinary teaching team in Veterinary Dermatology.

The combination of experience, both theoretical and practical, allows the veterinary professional to develop, first hand, specialized knowledge to carry out a good diagnosis and treatment of dermatological diseases from the theoretical point of view, with the latest developments and scientific advances and from the extensive practical experience of all teachers. The combination of a great team of interrelated teachers is what makes this Postgraduate Certificate unique among all those offered in similar courses.

The topics developed in the Postgraduate Certificate course address, in great depth, the most important small animal dermatoses, including dogs, cats and other non-traditional species of companion animals.

With this Postgraduate Certificate the veterinary professional acquires advanced knowledge of Veterinary Dermatology for daily clinical practice. The study system applied by this university provides a solid foundation in the specialized knowledge of the Physiopathology of the skin and latest generation dermatological therapeutics.

As it is an online Postgraduate Certificate course, students are not restricted by set timetables, nor do they need to physically move to another location. All of the content can be accessed at any time of the day, so you can balance your working or personal life with your academic life.

This **Postgraduate Certificate in Cutaneous Dysbiosis or Alterations of the Microbiome: Bacteria and Fungi** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by Small Animal Dermatology experts
- 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
- Breakthroughs in Dermatology in Small Animals
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Small Animal Dermatology
- 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

Don't miss the opportunity to study this Postgraduate Certificate with us. It's the perfect opportunity to advance your career and stand out in an industry with high demand for professionals"

This course is the best investment you can make when choosing a refresher programme to update your existing knowledge of Veterinary Dermatology"

This program comes with the best educational material, providing you with a contextual approach that will facilitate your learning.

This 100% online program will allow you to balalnce your studies with your professional work while increasing your knowledge in this field.

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 throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Dermatology in Small Animals and with extensive experience.

02

Objectives

This program in Cutaneous Dysbiosis or Microbiome Disorders: Bacteria and Fungi is designed to facilitate the performance of Veterinary Professionals the latest advances and most innovative treatments in the sector.

Learn about the latest advances in the field from the comfort of your home, thanks to the online format on which this program is based"

General Objectives

- Examine the concepts of microbiome and skin dysbiosis
- Identify the clinical signs and injury patterns associated with pyodermas, fungal dermatoses and protozoal dermatoses
- Delve into the different dermatoses of the module in their clinical, etiopathogenic, diagnostic and treatment aspects
- Establish the correct clinical and diagnostic approaches for each of the above diseases
- Know the most current treatments to control pyodermas, mycoses and protozoan dermatoses

Specific Objectives

- Design the office where dermatology is performed, within the clinic
- Planning the logistics of engaging in this specialty
- Develop expertise in skin pathophysiology
- Analyze the cutaneous manifestations of different noxas
- Examine study methods to address them
- Determine diagnostic methods
- Develop advanced knowledge of general dermatological therapy

An unique, key, and decisive educational experience to boost your professional development"

03

Course Management

The program includes in its teaching staff leading experts in Dermatosis of Endocrine, Metabolic, Nutritional and Congenital Origin: Bacteria and Fungi bring work experience to this training course. They are world-renowned veterinarians from different countries with proven theoretical and practical professional experience.

Our team of teachers, with expertise in dermatology in small animals, will help you reach success in your profession"

International Guest Director

Dr. Domenico Santoro is an eminence in the field of **Veterinary Dermatology**. He is the **only specialist in his field to hold dual certification**, one granted by the American College of Veterinary Microbiologists (ACVM) in Bacteriology/Micology and Immunology, and the other by the Board of the American College of Veterinary Dermatology.

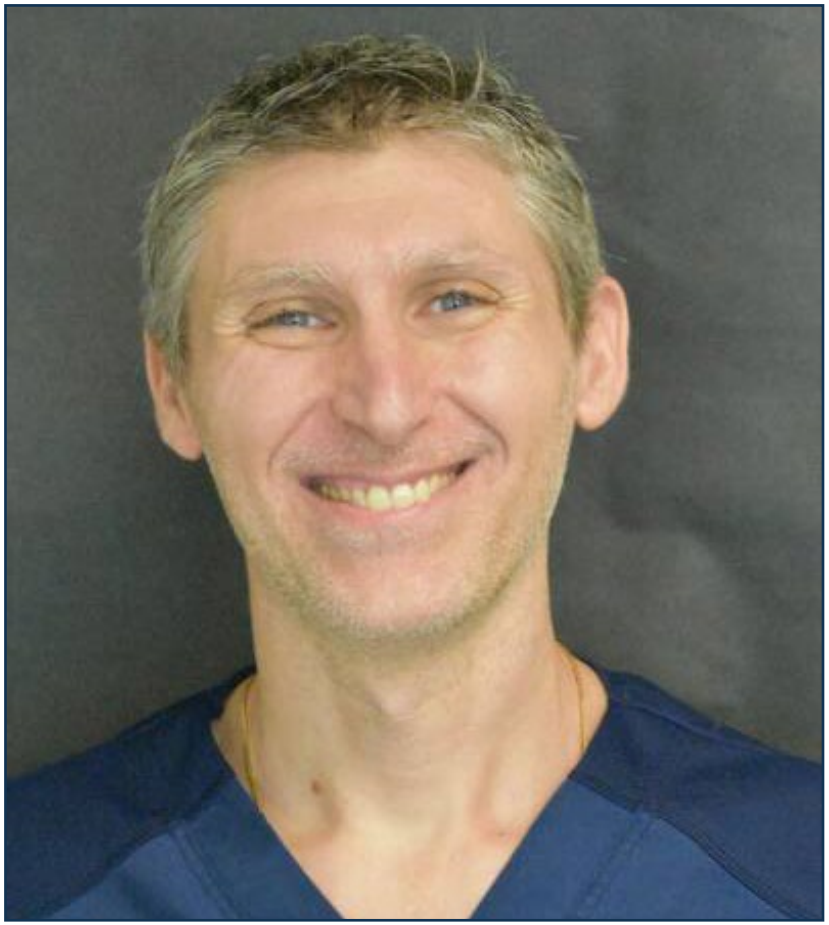
His career has been marked by the study of host-microbe interactions that occur in **Canine Atopic Dermatitis**. As a result of these analyses, he has developed the **evaluation of skin defense peptides**, quantifying at the molecular and protein level the expression of these products in the skin of healthy and affected dogs.

Santoro is a highly respected leader in the scientific community whose main commitment is to **continuous innovation** to promote excellence in veterinary dermatology. In the course of his clinical work, he has deepened his knowledge of the **cutaneous immune response** of dogs with Leishmaniasis, aerobic bacteria and other pathologies caused by allergens. He has also mastered cutaneous cryotherapy and laser skin surgery in pets.

In his career he also stands out for being **one of the three main researchers** in charge of the direction of the Laboratory of Comparative Dermatology of the University of Florida. From this **study center he promotes the "One Health" perspective** that investigates the development of simultaneous defenses between dogs and humans for dermatological diseases.

At the same time, he has been part of animal research departments at the **prestigious North American universities** of North Carolina and Illinois. Through his experiences, he became one of the founding members of the **International Committee for Allergic Diseases in Animals (ICADA)**. As a result, he has several dozen scientific publications in some of the most prestigious veterinary journals.

Position: Principal Investigator in the Laboratory of Comparative Dermatology at the University of Florida.



Dr. Santoro, Domenico

- Veterinarian at the University of Florida Veterinary Hospital
- Assistant Professor at the University of Florida College of Veterinary Medicine
- Doctor of Veterinary Science from the University of Illinois at Urbana-Campaign
- Residency Veterinary Residency at North Carolina State University
- Veterinary Degree at the University of Naples "Federico II"
- Member of: American College of Veterinary Microbiologists, American College of Veterinary Dermatology, European College of Veterinary Dermatology

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

Address

Dr. Machicote Goth, Gustavo

- Clinical Veterinarian Dermatologist at Clínica Vilanova
- Head of the Dermatology Reference Service DERMAPET
- Member and former Secretary of the Scientific Committee of GEDA (Dermatology Group of AVEPA)
- Dermatology Certificate by the ESAVS in Vienna
- Master in Small Animal Oncology by AEVA, Miguel de Cervantes University

Professors

Dr. Saló Mur, Eduard

- Veterinary Technical Director Veterinary Clinic Gran Vía Mivet
- Veterinary Director Veterinary Clinic Gran Vía
- Veterinary Director Veterinary Center University of Barcelona
- Accredited in Veterinary Dermatology by AVEPA
- Dermatology Clinic Veterinary Hospital UAB
- Responsible and speaker of the continuing education programs in dermatology of AVEPA

04

Structure and Content

The structure of the content has been designed by the best professionals in the Dermatology in Small Animals sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to veterinary medicine.

This Postgraduate Certificate contains the most complete and up-to-date scientific program on the market"

Module 1. Cutaneous Dysbiosis or Alterations of the Microbiome (Bacteria and Fungi)

1.1 Bacterial Dysbiosis
- 1.1.1. Surface Pyodermas
- 1.1.2. Superficial Pyodermas
- 1.1.3. Deep Pyodermas
  - 1.1.3.1. Cytological Differences of the Different Pyodermas
  - 1.1.3.2. Localized Deep Pyodermas
  - 1.1.3.3. Deep Pyoderma in German Shepherds
- 1.1.4. Antibiotic Therapy
  - 1.1.4.1. Antibiogram Reading
  - 1.1.4.2. MRS Bacterial Strains Diagnostic and Therapeutic Strategies

1.2 Rare Bacteria Mycobacteria
- 1.2.1. Mycobacterium tuberculosis
- 1.2.2. Mycobacterium Lepraemurium
- 1.2.3. Saprophytic Mycobacteriosis in Immunocompetent Hosts
- 1.2.4. Mycobacteriosis in Immunodeficient Hosts

1.3 Folliculitis Complex Furunculosis-Cellulitis
- 1.3.1. Pathogenesis and Clinical Characteristics
- 1.3.2. Types of Folliculitis, Forunculosis and Cellulitis

1.4 Subcutaneous Abscesses
- 1.4.1. Subcutaneous Abscesses in Dogs
- 1.4.2. Subcutaneous Abscesses in Cats

1.5 Various Bacterial Infections
- 1.5.1. Necrotizing Fasciitis
- 1.5.2. Dermatophilosis
- 1.5.3. Filamentous Bacteria

1.6 Superficial Mycotic Dysbiosis
- 1.6.1. Dermatophytosis
  - 1.6.1.1. DTM Cultivation Characteristics of the Most Common Dermatophytes
- 1.6.2. Yeast Dermatosis

1.7 Subcutaneous Mycoses, Systemic Mycoses and Other Mycoses
- 1.7.1. Subcutaneous Mycoses Sporotrichosis
- 1.7.2. Subcutaneous Mycoses Mycetomas and Other Subcutaneous Mycoses
- 1.7.3. Systemic Mycoses Cryptococcosis, Blastomycosis, Coccidiomycosis, Histoplasmosis
- 1.7.4. Candidiasis, Aspergillosis, Other Mycoses

1.8 Antifungal Treatments
- 1.8.1. Topical Treatments
- 1.8.2. Systemic Treatment

1.9 Dermatoses due to Algae, Rickettsia and Viruses
- 1.9.1. Diseases caused by Algae
- 1.9.2. Rickettsial Dermatoses Erlichiosis Mycoplasmosis
- 1.9.3. Dermatoses caused by Virus
  - 1.9.3.1. Dermatoses caused by Virus in Cats
  - 1.9.3.2. Dermatoses caused by Virus in Dogs

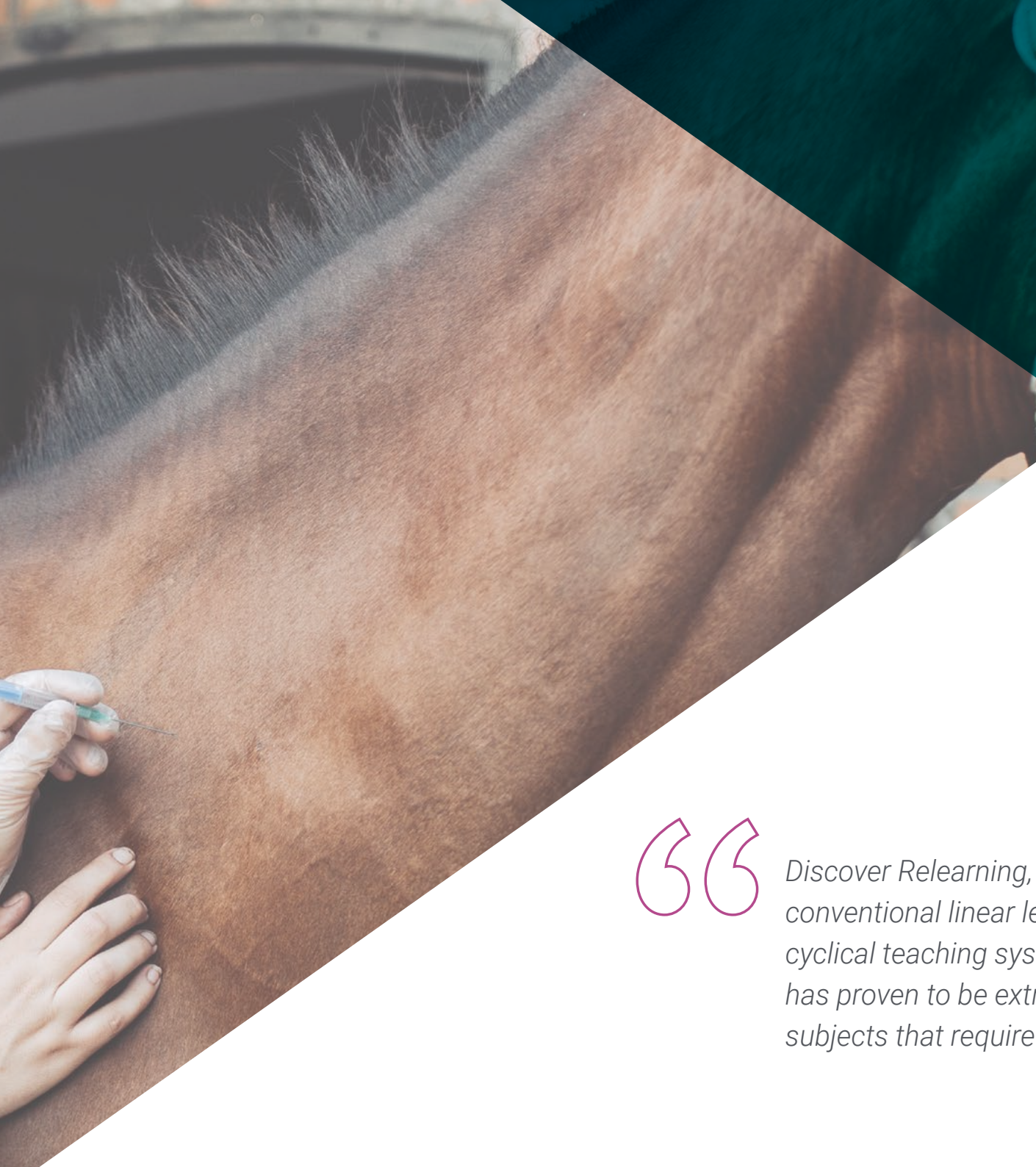
1.10 Dermatosis due to Protozoa Leishmaniasis
- 1.10.1. Typical Cutaneous Manifestations of Leishmaniasis
- 1.10.2. Treatment Suggestions in Leishmaniasis

Achieve professional success with this high-level training provided by prestigious professionals with extensive experience in the sector"

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.

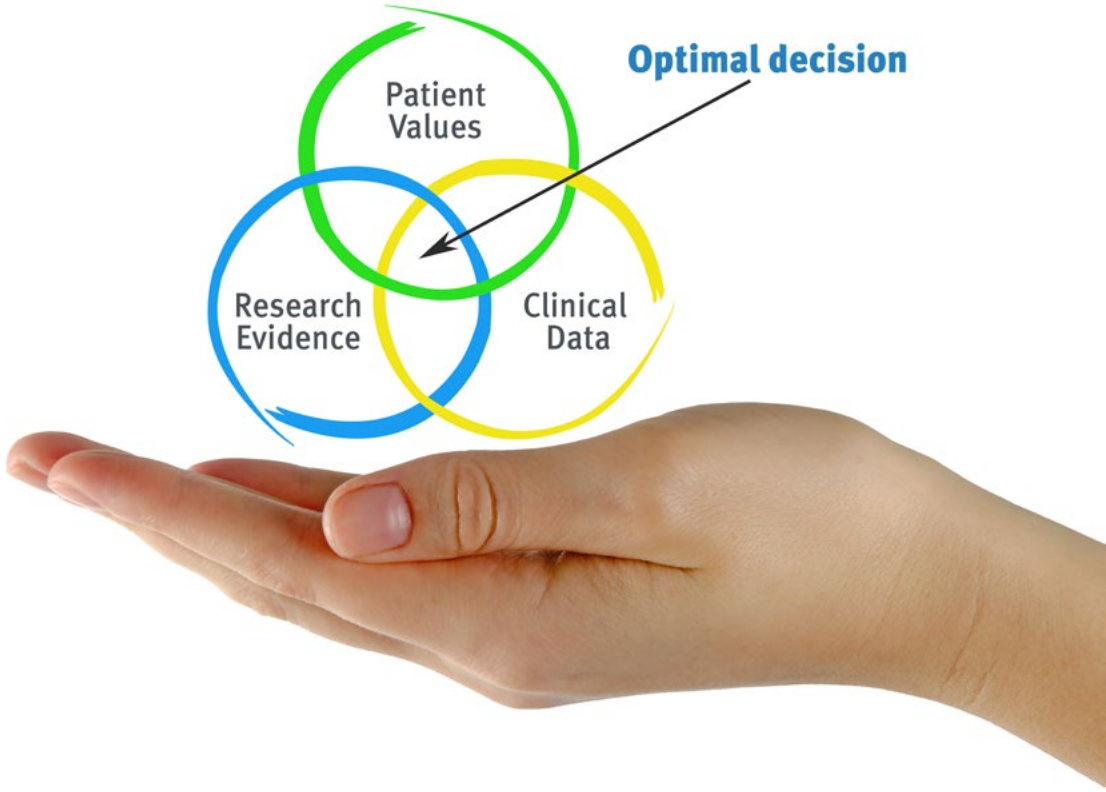


Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is 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, in an attempt to recreate the actual conditions in a veterinarian's professional practice.

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

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

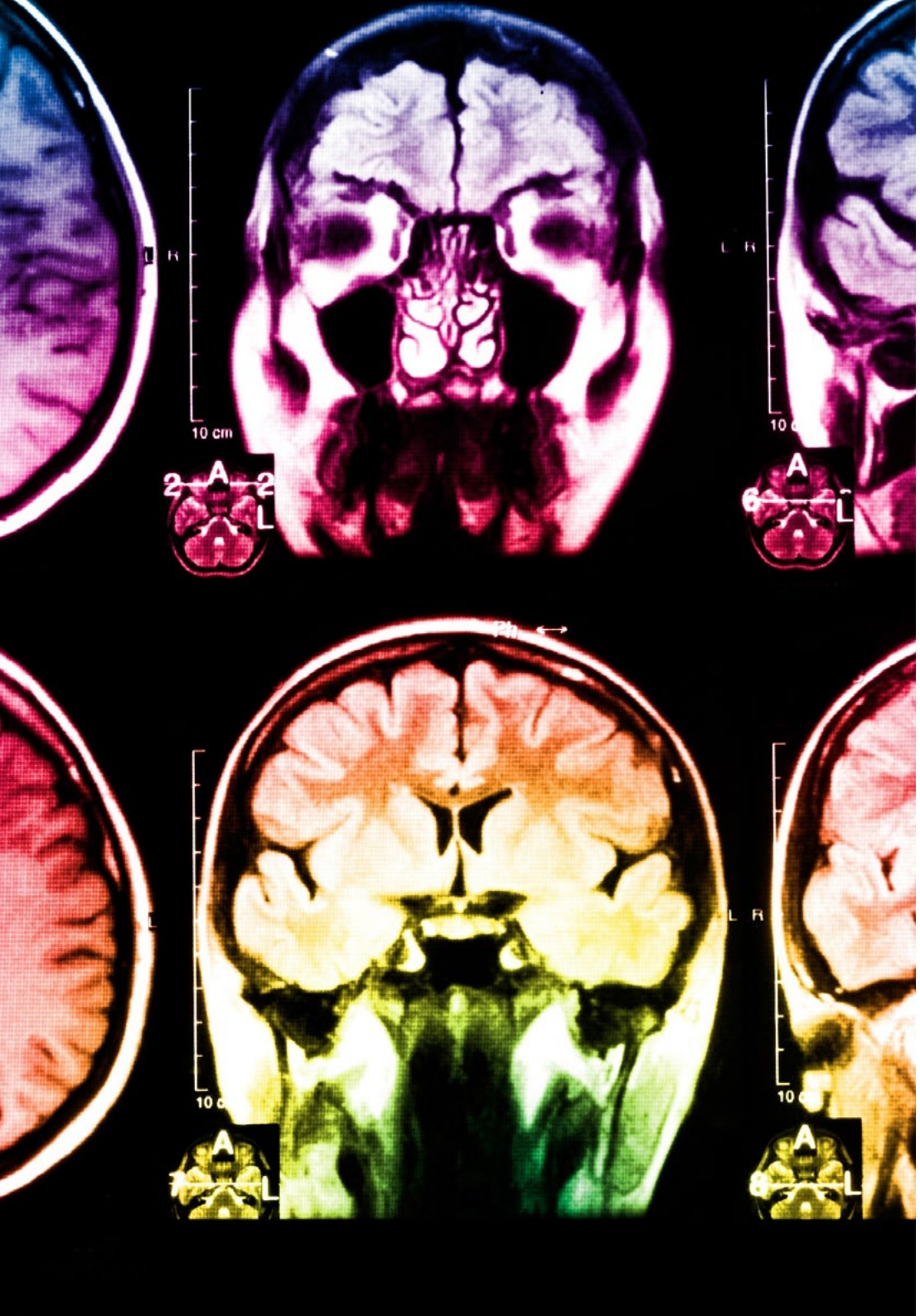
1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Veterinarians 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 65,000 veterinarians have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. Our teaching method is developed in a highly demanding environment, where the students have a high socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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 applied to the 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.

Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary 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.

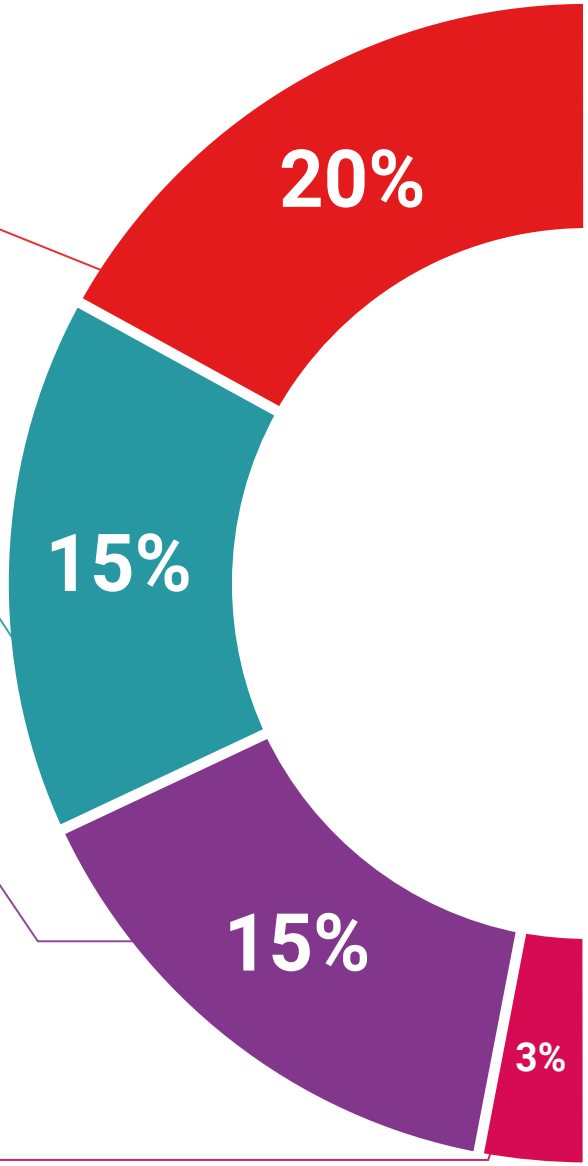
Interactive Summaries

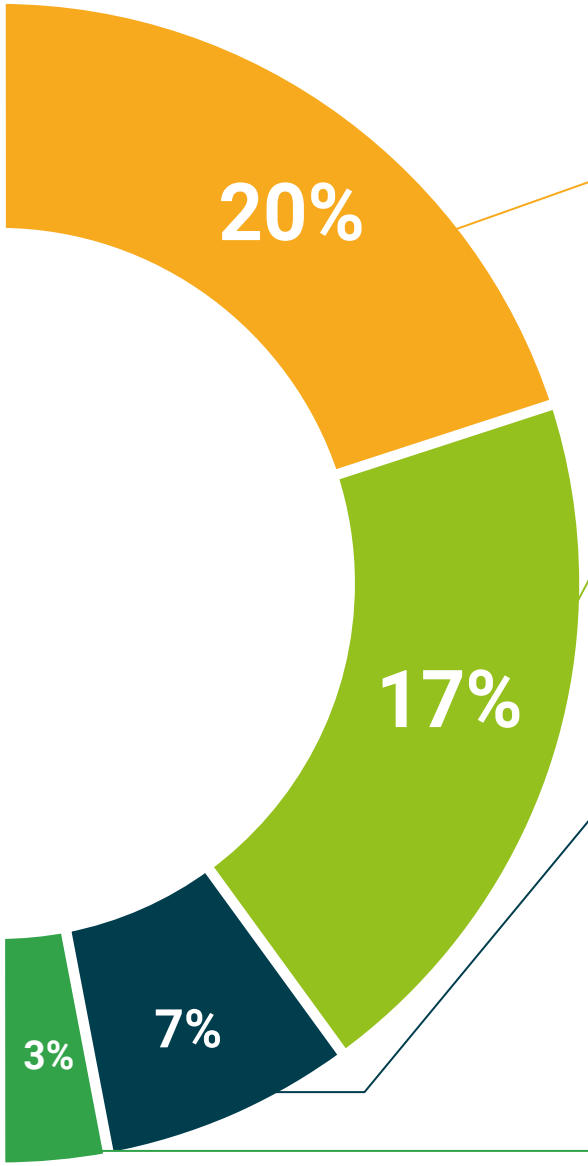
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 evaluate and re-evaluate 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 suggesting that observing third-party experts can be useful.

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

The Postgraduate Certificate in Cutaneous Dysbiosis or Alterations of the Microbiome: Bacteria and Fungi guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Cutaneous Dysbiosis or Alterations of the Microbiome: Bacteria and Fungi** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University via tracked delivery*.**

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Cutaneous Dysbiosis or Alterations of the Microbiome: Bacteria and Fungi**

Official Nº of Hours: **150 h.**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Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Cutaneous Dysbiosis or Alterations of the Microbiome: Bacteria and Fungi

This is a qualification awarded by this University, with 6 ECTS credits and equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

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

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