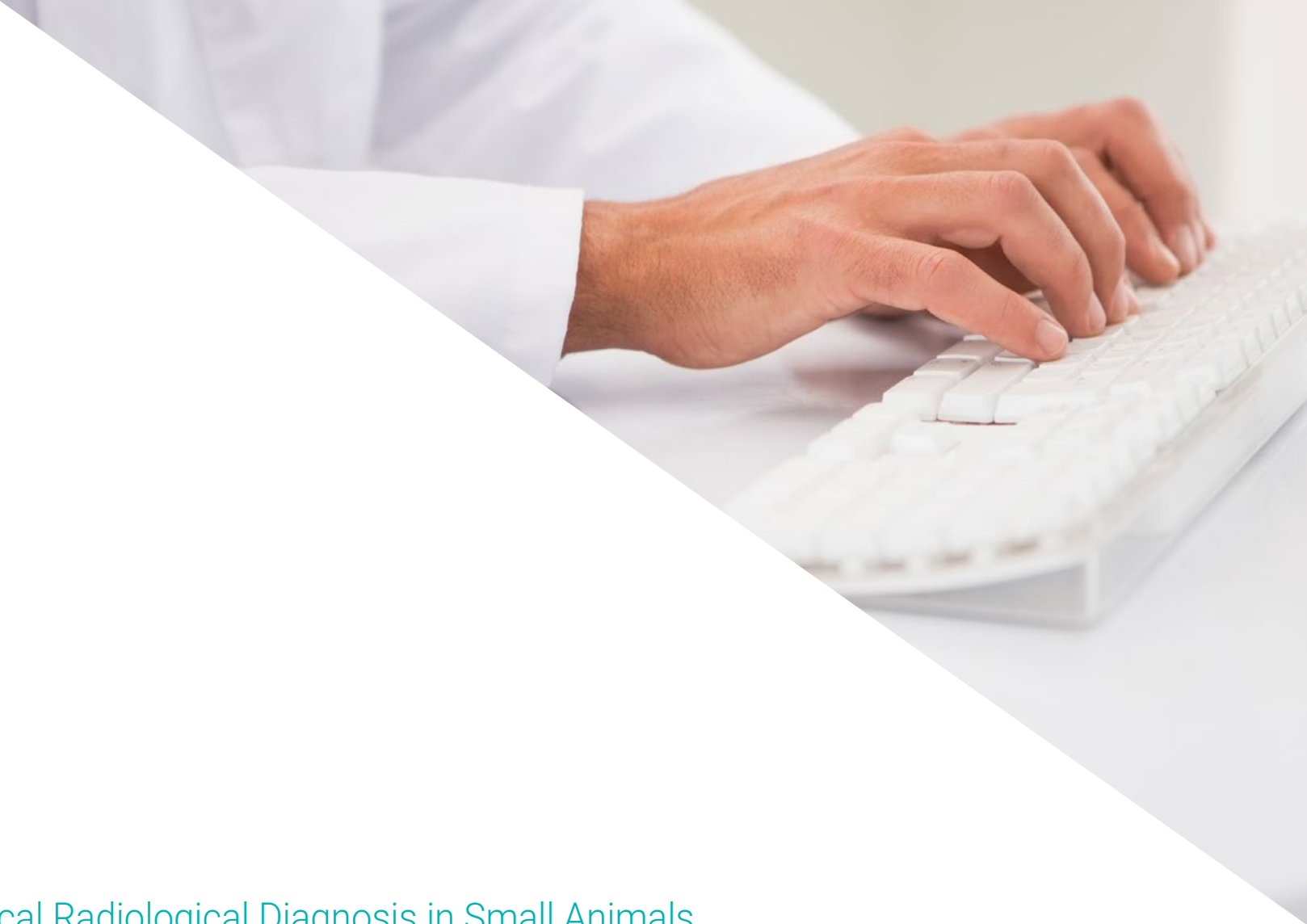


# Postgraduate Diploma

Orthopedic and Neurological  
Radiological Diagnosis in Small  
Animals





## Postgraduate Diploma

### Orthopedic and Neurological Radiological Diagnosis in Small Animals

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

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-diploma/orthopedic-neurological-radiological-diagnosis-small-animals](http://www.techtute.com/us/veterinary-medicine/postgraduate-diploma/orthopedic-neurological-radiological-diagnosis-small-animals)

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01

# Introduction

Diagnostic Radiological tests must have high quality images in order to be properly understood by veterinarians. This technical part has been advancing by leaps and bounds thanks to technological improvements, but it is necessary for professionals to constantly update their knowledge in order to keep abreast of major developments. Therefore, with this program we want to offer you a specific specialization in Orthopedic and Neurological Radiological Diagnosis in Small Animals, as it can be of daily use in the veterinary practice.







“

*Specialize in Orthopedic and  
Neurological Radiological  
Diagnosis and get to use the  
latest tools in this field"*

Diagnostic imaging tests are indispensable in the veterinary practice, becoming a common tool in the practice of professionals, as they allow them to make early diagnoses that can save the lives of animals with certain pathologies. Therefore, on this occasion, TECH offers an academic program prepared by a team of experts in the field that focuses on Orthopedic and Neurological Radiological Diagnosis in Small Animals.

In general, definitive diagnosis of central nervous system diseases requires advanced imaging tests (CT and MRI), cerebrospinal fluid analysis and histopathological study (among others). However, in some pathologies it is possible to make an approximation to the diagnosis and, sometimes, a definitive diagnosis in the clinic through the use of simple radiography and myelography, complementing the rest of the diagnostic tests. Therefore, its study is of great value to improve the training of veterinarians.

On the other hand, this program focuses on the field of orthopedics and traumatology, taking into account that the bone is a complex tissue and requires specialized knowledge to understand the fundamental activities it carries out. However, through the radiological method, a specialized knowledge of the different pathologies that may affect it can be developed.

In short, it is a program based on scientific evidence and daily practice, with all the nuances that each professional can contribute, enriched by the critical assessment that every professional must keep in mind.

Throughout this course, the student will learn about all the current approaches to the different challenges posed by his or her profession. A high-level step that will become a process of improvement, not only on a professional level, but also on a personal level. In addition, TECH assumes a social commitment: to help the updating of highly qualified professionals and to develop their personal, social and labor skills during the development of the same. And, to do so, it will not only take you through the theoretical knowledge offered, but will show you another way of studying and learning, more organic, simpler and more efficient. It works to maintain motivation and to create a passion for learning; it encourages thinking and the development of critical thinking.

This **Postgraduate Diploma in Orthopedic and Neurological Diagnosis Radiology in Small Animals** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- ◆ The development of case studies presented by experts in Veterinary Radiology.
- ◆ The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- ◆ Latest developments in Veterinary Radiology
- ◆ Practical exercises where self-assessment can be used to improve learning.
- ◆ Special emphasis on innovative methodologies in Veterinary Radiology
- ◆ 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



*With this Postgraduate Diploma we give you the opportunity to acquire superior training in Radiological Diagnosis so that you can apply it to your practice in the veterinary clinic"*

“

*At TECH we help you to specialize in Orthopedic and Neurological Radiological Diagnosis in a simple way, thanks to our innovative methodology”*

Its teaching staff includes professionals belonging to the veterinary field, who contribute their work experience to this training, as well as renowned specialists from reference societies and prestigious universities.

Its Multimedia Content, elaborated with the latest Educational Technology, will allow the Professional a situated and contextual learning, that is to say, a Simulated Environment that will provide an immersive specialization programmed to train in real situations.

This program is designed around Problem Based Learning, whereby the specialist must try to solve the different professional practice situations that arise during the academic year. For this purpose, the professional will be assisted by an innovative system of interactive videos made by renowned and experienced experts in Veterinary Radiology.

*Our specialization, of high academic level, will allow you to achieve superior training in a short period of time.*

*Our online format will allow you to study in a comfortable way from wherever you choose.*





# 02 Objectives

TECH's main objective in offering specific specializations in the veterinary field is that professionals are able to care for animals with full guarantees of success. For this reason, we offer you a program with completely up-to-date information and in which you can find the latest practices.





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*Our goal is to achieve academic  
excellence and help you  
achieve professional success”*



## General Objectives

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- ♦ Identify the normal radiographic anatomy of the central nervous system as a basis for good interpretation
- ♦ Analyze the radiological signs of the main diseases affecting the nervous system
- ♦ Develop a systematic approach to the assessment of radiological imaging of the nervous system and obtain the maximum diagnostic information
- ♦ Present the most frequent diagnostic errors in the interpretation of radiological images during the study of the central nervous system
- ♦ Determine the normal anatomical picture of the structures forming the neurological system, mainly the spine and skull
- ♦ Define the main pathological alterations that can be observed in radiographs
- ♦ Examine the myelography technique
- ♦ Examine the specific anatomy in order to extrapolate the different orthopedic pathologies at the radiological level
- ♦ Analyze the functioning of the growth plate in order to have an adequate perception of the radiological evolution of the bone
- ♦ Develop the radiological evolution of the bone after a fracture
- ♦ Radiological visualization of bone healing
- ♦ Generate specialized knowledge to prevent complications in our clinical/surgical practice
- ♦ Determine the importance of arthritis/arthrosis in our daily clinical practice
- ♦ Be able to make a clinical prognosis through an orthopedic radiological study
- ♦ Determine the limitations of certain radiological studies to diagnose certain orthopedic pathologies and the different types of surgical techniques in traumatology and orthopedics
- ♦ Extrapolate the knowledge of these techniques in vivo to visualize the evolution.
- ♦ Determine radiographic projections and positioning to obtain images with greater diagnostic value
- ♦ Examine the radiographic anatomy of the forelimb and hind limb, looking at the differences between species and breeds
- ♦ Identify the different types of fractures, treatment possibilities and assess their evolution and possible complications with a radiological study
- ♦ Differentiate a physiological bone tissue from a pathological one, and we will know what steps to follow to reach a diagnosis Identify pathological fractures
- ♦ Determine the limitations of radiological studies for the diagnosis of certain orthopedic pathologies



## Specific Objectives

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### Module 1

- ♦ Propose the use of plain radiography and contrast radiological studies for the approach to the diagnosis of some inflammatory diseases of the central nervous system: infectious and non-infectious
- ♦ Establish radiological signs compatible with herniated discs and other degenerative diseases
- ♦ Justify the use of radiography as a diagnostic tool for the initial evaluation of the patient with spinal cord trauma
- ♦ Define the radiological patterns of myelography for the diagnosis of intradural (meningioma) and extradural (ependymoma and astrocytoma) tumors
- ♦ Identify radiologic signs secondary to metabolic and nutritional pathologies that cause encephalopathy
- ♦ Present the congenital anomalies of the central nervous system and surrounding bony structures that can be identified by radiographic study
- ♦ Examine the normal anatomical image of each spinal segment and the skull
- ♦ Improve the radiographic technique and positioning of the animal for the assessment of the neurological system
- ♦ Identify the congenital pathologies that can be observed in the spine
- ♦ Determine the different limitations encountered when assessing the skull

### Module 2

- ♦ Determine the organization of the growth plate to understand its impact on radiological imaging
- ♦ Examine the blood supply to the bone in order to extrapolate radiologically to the bone and its cicatricial evolution
- ♦ Visualize bone and fibrocartilaginous components radiologically

- ♦ Determine the stages of fracture repair and identify them radiographically in order to be able to apply this knowledge during a postoperative recovery period
- ♦ Anticipate possible complications in the bone healing phase by means of radiological monitoring
- ♦ Correctly visualize the different types of complications and differentiate between them
- ♦ Examine radiographically a case understanding its clinical significance, as well as the evolution of the arthritis/arthrosis
- ♦ Differentiate the various orthopedic diseases through radiographic study

### Module 3

- ♦ Determine how to differentiate stable/unstable hip fractures and consider medical or surgical treatment
- ♦ Recognize femur fractures, and their importance in early diagnosis to avoid serious complications
- ♦ Examine the structures of the skull, jaw and teeth, emphasizing the importance of correct projections and showing the limitations of radiology in the structures of the the skull
- ♦ Identify tibial fractures
- ♦ Analyze the importance of radiographs in the forelimb by examining its anatomy and analyzing the most typical fractures in this area
- ♦ Examine radiologically the different pathologies of the distal extremity
- ♦ Improve radiological positioning for the assessment of dislocations
- ♦ Differentiate between the different types of joint dislocations
- ♦ Correctly diagnose and classify the different fractures at the level of the growth nucleus and involving the adjacent epiphysis and metaphysis
- ♦ Identify the different muscle, tendon and ligament pathologies by radiological imaging and understand their limitations

03

# Course Management

The teaching team, formed by professionals of reference in the veterinary field and with years of experience both in consultation and teaching, will provide detailed information in Veterinary Radiology in Small Animals. A unique opportunity that will help





“

*We provide you with the best  
teaching team so you can learn  
with the leading experts in the field”*

## Management



### Dr. Gómez Poveda, Bárbara

- ♦ Parque Grande Veterinary Clinic. General veterinary
- ♦ Veterinary emergencies Las Rozas, Madrid. Emergency and hospitalization service
- ♦ Barvet – Veterinary at home Mobile Veterinary Director. Madrid
- ♦ Parla Sur Veterinary Hospital. Emergency and hospitalization service
- ♦ Veterinary Degree. Complutense University of Madrid
- ♦ Postgraduate in Small Animal Surgery (GPCert SAS). Madrid Improve International
- ♦ Online postgraduate course in Small Animal Clinic. Autonomous University of Barcelona

## Professors

### Dr. Moreno, Lorena

- ♦ Graduated in Veterinary Medicine from the Complutense University of Madrid in 2012.
- ♦ Postgraduate Course in Small Animal Surgery and Anesthesia at the UAB
- ♦ Currently taking a postgraduate course in Neurology for veterinarians on the web.
- ♦ Senior Veterinarian, as Head Clinician, at Momo Veterinary Hospital from Madrid, Spain Since 2015
- ♦ Veterinarian at the Veterinary Hospital "Sierra Oeste" in San Martín de Valdeiglesias (Madrid). 2014-2015

### Dr. Lázaro González, María

- ♦ Degree in Veterinary Medicine from the Alfonso X El Sabio University Madrid, 2018
- ♦ GPCert in feline medicine 2020
- ♦ Postgraduate in Diagnostic Imaging
- ♦ Postgraduate in Feline Medicine
- ♦ Internship in animal anatomy during the veterinary degree program.
- ♦ Responsible for the emergency, internal medicine, radiology and ultrasound services at Gattos Hospital Feline Clinical Center (2018-2020)

### Dr. Moliní Aguiar, Gabriela

- ♦ Head of the Radiology Department of the Petiberia Veterinary Clinic. Since 2018
- ♦ Responsible for the anesthesia service at Petiberia Veterinary Clinic. Since 2017
- ♦ Graduated in Veterinary Medicine from the Complutense University of Madrid in 2014.
- ♦ Neurology in the Feline and Canine patient. Novotech. November 2020.
- ♦ Internal medicine in the feline patient. Novotech. November 2020.
- ♦ Course of radiological interpretation in small animals of the Veterinary College of Madrid. June 2020
- ♦ Master in Microbiology and Parasitology: research and development. September 2015.

### Dr. García Montero, Javier

- ♦ In Charge of Trauma and Orthopedics, Surgery and Anesthesia. Veterinary Hospital Cruz Verde (Alcazar de San Juan). Since 2019
- ♦ Degree in Veterinary, Faculty of Veterinary Medicine, Córdoba 2009 -2015.
- ♦ Studying the Postgraduate Course in Soft Tissue Surgery and Anesthesia in Small Animals by the Autonomous University of Barcelona
- ♦ Certificate of Treatment of Fractures in Toy Dogs and Cats. UCM Online University, 2019
- ♦ Tibial Plateau Leveling Workshop
- ♦ Theoretical and practical sessions on fracture management in the feline patient.
- ♦ Theoretical and practical seminar on carpal and tarsal arthrodesis.
- ♦ Joint Instability Workshop

### Dr. Gandía, Anaí

- ♦ Veterinarian at Veterinary Clinic El Pinar (Navalcarnero, Madrid). Since 2020
- ♦ Graduated in Veterinary Medicine from Alfonso X El Sabio University in 2020.
- ♦ Collaboration as a student in the Neurology Service of the HCV of the UAX in the area of small animals. 2019-2020
- ♦ Currently attending the International Improvement Postgraduate Course on "Small Animal Surgery: soft tissues, traumatology and neurosurgery"
- ♦ Colvema course "Diagnosis of alopecia in the dog" September 2020.
- ♦ Colvema course "Canine cutaneous mastocytoma, how should we act?" November 2020.
- ♦ Leganés Norte Veterinary Clinic, as VCT. 2017-2018



# 04

# Structure and Content

The contents of this Postgraduate Diploma in Orthopedic and Neurological Diagnosis Radiology in Small Animals have been designed by a team of university experts, backed by their years of experience. In this way, they have been in charge of programming a totally up-to-date syllabus aimed at the professional of the 21st century, who demands high educational quality and knowledge of the main innovations in the field.





“

*Our syllabus has been created following the criteria of excellence set by our own institution and demanded by today's society"*

## Module 1. Radiological Diagnosis in Neurology

- 1.1. Radiological Anatomy
  - 1.1.1. Structures Assessable by Radiology
  - 1.1.2. Normal Radiological Anatomy of the Spine
  - 1.1.3. Normal Radiological Anatomy of the Skull and its Structures
- 1.2. Radiological Examination of the Spine
  - 1.2.1. C1-C6
  - 1.2.2. T1-T13
  - 1.2.3. L1-L7
  - 1.2.4. S1-Cd
- 1.3. Contrast Examination
  - 1.3.1. Cisternal Myelography
  - 1.3.2. Lumbar Myelography
  - 1.3.3. Pathological Alterations Observed by Myelography
- 1.4. Diagnosis of Vascular Pathologies
  - 1.4.1. Vascular Pathologies: How Far Can We Go with Conventional Radiology
  - 1.4.2. Assessment of Vascular Pathologies by Contrast Techniques
  - 1.4.3. Assessment of Vascular Pathologies by Other Imaging Techniques
- 1.5. Cerebral and Meningeal Malformations
  - 1.5.1. Hydrocephalus
  - 1.5.2. Meningocele
- 1.6. Inflammatory Pathology
  - 1.6.1. Infectious
  - 1.6.2. Non-infectious
  - 1.6.3. Disc Spondylitis
- 1.7. Degenerative Pathologies
  - 1.7.1. Degenerative Disc Disease
  - 1.7.2. Wobbler Syndrome
  - 1.7.3. Lumbosacral Instability, Cauda Equina Syndrome
- 1.8. Spiral Trauma
  - 1.8.1. Pathophysiology
  - 1.8.2. Fractures

- 1.9. Oncology
  - 1.9.1. Primary Neoplastic Diseases
  - 1.9.2. Secondary Metastatic Diseases
- 1.10. Other Neurological Diseases
  - 1.10.3. Metabolic
  - 1.10.4. Nutritional
  - 1.10.5. Congenital

## Module 2. Orthopedic Radiological Diagnosis I

- 2.1. The Growth Plate
  - 2.1.1. Organization of the Growth Plate and its Impact on Radiological Imaging
  - 2.1.2. Blood Supply of the Growth Plate
  - 2.1.3. Structure and Function of the Growth Plate Cartilaginous Components
    - 2.1.3.1. Reserve Zone
    - 2.1.3.2. Proliferative Zone
    - 2.1.3.3. Hypertrophic Zone
  - 2.1.4. Bone Components (Metaphysis)
  - 2.1.5. Fibrous and Fibrocartilaginous Components
  - 2.1.6. Radiological Imaging of the Growth Plate at Different Stages of Growth
    - 2.1.6.1. Epiphysiolysis
    - 2.1.6.2. Other Growth Disorders
- 2.2. Fracture Repair
  - 2.2.1. Radiological Response of Traumatized Bone
  - 2.2.2. Phased Fracture Repair
    - 2.2.2.1. Inflammatory Phase
    - 2.2.2.2. Repair Phase
    - 2.2.2.3. Remodelling Phase
    - 2.2.2.4. Callus formation
    - 2.2.2.5. Fracture Healing
    - 2.2.2.6. First Intention Repair
    - 2.2.2.7. Second Intention Repair
    - 2.2.2.8. Clinical Union
    - 2.2.2.9. Clinical Union Ranges
- 2.3. Fracture Complications
  - 2.3.1. Delayed Union

- 2.3.2. Non-union
- 2.3.3. Bad Union
- 2.3.4. Osteomyelitis
- 2.4. Radiologic Imaging of Arthritis and Polyarthritis
  - 2.4.1. Types of Arthritis and Polyarthritis
  - 2.4.2. Clinical Diagnosis
  - 2.4.3. Differential Diagnosis Radiology
- 2.5. Radiological Imaging of Osteoarthritis
  - 2.5.1. Etiology
  - 2.5.2. Radiological Diagnosis
  - 2.5.3. Prognosis According to Radiological Imaging
- 2.6. Decision-making in Traumatology and Orthopedics Based on Radiologic Diagnosis
  - 2.6.1. Fulfilled Clinical Function
  - 2.6.2. Implant Ruptures
  - 2.6.3. Implant Bends
  - 2.6.4. Implant Migrates
  - 2.6.5. Rejection
  - 2.6.6. Infections
  - 2.6.7. Thermal Interference
- 2.7. Radiology of Orthopedic Diseases
  - 2.7.1. Radiology of Osteochondritis Dissecans
  - 2.7.2. Panosteitis
  - 2.7.3. Retained Cartilaginous Nucleus
  - 2.7.4. Hypertrophic Osteodystrophy
  - 2.7.5. Craniomandibular Osteopathy
  - 2.7.6. Bone Tumors
  - 2.7.7. Other Bone Diseases
- 2.8. Radiology of Hip Dysplasia
  - 2.8.1. Physiological Hip Radiology
  - 2.8.2. Pathological Hip Radiology
  - 2.8.3. Gradation of Hip Dysplasia
  - 2.8.4. Surgical Treatments for Hip Dysplasia
  - 2.8.5. Clinical/Radiographic Progression of Hip Dysplasia
- 2.9. Radiology of Elbow Dysplasia
  - 2.9.1. Physiological Elbow Radiology

- 2.9.2. Pathological Elbow Radiology
- 2.9.3. Types of Elbow Dysplasia
- 2.9.4. Surgical Treatments for Elbow Dysplasia
- 2.9.5. Clinical/Radiographic Progression of Elbow Dysplasia
- 2.10. Radiology of the Knee
  - 2.10.1. Radiology of Anterior Cruciate Ligament Rupture
    - 2.10.1.1. Surgical Treatment of Anterior Cruciate Ligament Rupture
  - 2.10.2. Radiology of Patellar Dislocation
    - 2.10.2.1. Gradation of Patellar Dislocation
    - 2.10.2.2. Surgical Treatment of Patellar Dislocation

### Module 3. Orthopedic Radiological Diagnosis II

- 3.1. Anatomy Radiology of the Pelvis
  - 3.1.1. General Considerations
  - 3.1.2. Radiologic Assessment of Stable Hip Fractures
  - 3.1.3. Surgical Radiological Indication
    - 3.1.3.1. Intra-articular Fracture
    - 3.1.3.2. Closure of the Pelvic Canal
    - 3.1.3.3. Joint Instability of a Hemipelvis
  - 3.1.4. Fracture Separation of the Sacro-Iliac Joint
  - 3.1.5. Fractures of the Acetabulum
  - 3.1.6. Fracture of the Ilium
  - 3.1.7. Ischial Fractures
  - 3.1.8. Pubic Symphysis Fractures
  - 3.1.9. Fractures of the Ischial Tuberosity
- 3.2. Radiological Imaging of Femur Fractures
  - 3.2.1. Proximal Femoral Fractures
  - 3.2.2. Fractures of the Medium Third of the Femur
  - 3.2.3. Fractures of the Distal Third of the Femur
- 3.3. Radiological Imaging of Tibial Fractures
  - 3.3.1. Fractures of the Proximal Third

- 3.3.2. Fractures of the Middle Third of the Tibia
- 3.3.3. Fractures of the Distal Third of the Tibia
- 3.3.4. Fractures of the Tibial Malleoli
- 3.4. Anterior Member
  - 3.4.1. Radiological Imaging of the Scapula Fractures
  - 3.4.2. Radiological Imaging of the Humerus Fractures
  - 3.4.3. Radiological Imaging of the Radius and Ulnar Fractures
- 3.5. Fractures of the Maxilla and Mandible, Radiological Imaging of the Skull
  - 3.5.1. Jaw Radiology
    - 3.5.1.1. Rostral Jaw
    - 3.5.1.2. Dental Radiology
    - 3.5.1.3. Temporomandibular Joint (TMJ)
  - 3.5.2. Radiology of the Maxilla
    - 3.5.2.1. Dental Radiology
    - 3.5.2.2. Radiology of the Maxilla
  - 3.5.3. Radiology to the Paranasal Sinus
  - 3.5.4. Radiology of the Skull
  - 3.5.5. Oncology
- 3.6. Radiology of Fractures and Other Alterations Resulting in Incongruence of the Articular Surface
  - 3.6.1. Fractures Affecting the Growth Nucleus
  - 3.6.2. Classification of the Epiphysis Based on its Type
  - 3.6.3. Classification of Slipped or Split Fractures Involving the Growth Nucleus and Adjacent Epiphyseal Metaphysis
  - 3.6.4. Clinical Assessment and Treatment of Damage to Nucleus Growth
  - 3.6.5. Radiology of Joint Fractures in Adult Animals
- 3.7. Joint Dislocations, Radiology
  - 3.7.1. Radiological Positioning
  - 3.7.2. Nomenclature
  - 3.7.3. Traumatic Dislocations
  - 3.7.4. Scapulohumeral Instability
- 3.8. Interventional Radiology in Traumatology
  - 3.8.1. Radiology of the Fractures Affecting the Growth Nucleus
  - 3.8.2. Radiology of Fractures Involving the Epiphysis based on Their Type
  - 3.8.3. Radiology of Slipped or Split Fractures Involving the Growth Nucleus, Epiphysis and Adjacent Metaphysis
  - 3.8.4. Radiology of Joint Fractures in Adult Animals
- 3.9. Radiology of Muscular, Tendinous and Ligamentous Diseases
  - 3.9.1. Radiology of Muscular Diseases
  - 3.9.2. Radiology of Tendinous and Ligamentous Diseases
  - 3.9.3. Other Alternatives for Diagnostic Imaging of these Pathologies
- 3.10. Radiology of Metabolic and Nutritional Disorders
  - 3.10.1. Introduction
  - 3.10.2. Radiologic Imaging in Secondary Nutritional Hyperparathyroidism
  - 3.10.3. Radiologic Imaging in Secondary Renal Hyperparathyroidism
  - 3.10.4. Radiological Imaging in Hypervitaminosis A
  - 3.10.5. Radiologic Imaging in Pituitary Dwarfism





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 Harvard 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.



In this program you will have access to the best educational material, prepared with you 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

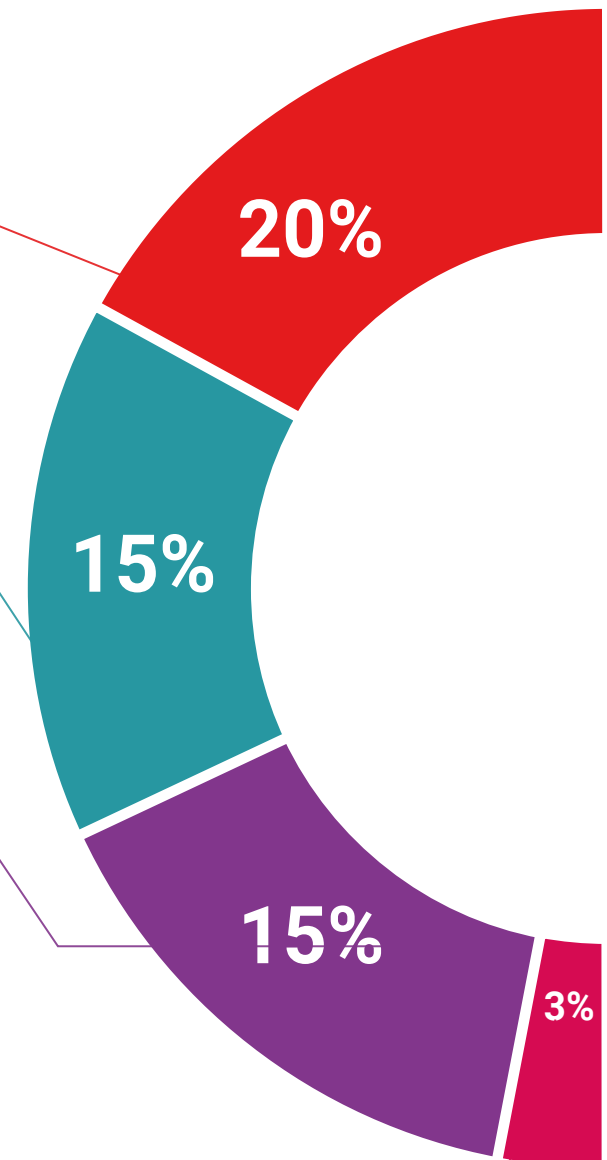
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive multimedia content presentation training Exclusive system 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 your 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 Diploma in Orthopedic and Neurological Radiological Diagnosis in Small Animals guarantees, in addition to the most rigorous and up-to-date training, access to a certificate issued by TECH Technological University.



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*Successfully complete this training program and receive your university certificate without travel or laborious paperwork”*

This **Postgraduate Certificate in Orthopedic and Neurological Diagnosis Radiology in Small Animals** contains the most complete and up-to-date scientific program 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 Orthopedic and Neurological Radiological Diagnosis in Small Animals**

Official N° of Hours: **450 h.**



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



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education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
development language  
classroom



**Postgraduate Diploma**  
Orthopedic and  
Neurological Radiological  
Diagnosis in Small  
Animals

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

# Postgraduate Diploma

## Orthopedic and Neurological Radiological Diagnosis in Small Animals

