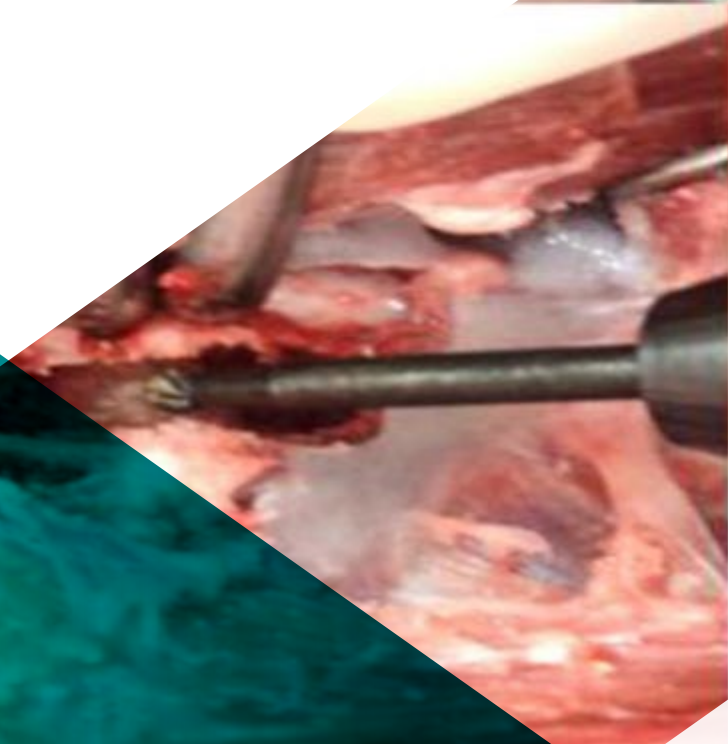


# Postgraduate Certificate Spinal Cord Pathologies in Small Animals





## Postgraduate Certificate Spinal Cord Pathologies in Small Animals

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

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-certificate/spinal-cord-pathologies-small-animals](http://www.techtute.com/us/veterinary-medicine/postgraduate-certificate/spinal-cord-pathologies-small-animals)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

This high-quality program takes an in-depth look at all the pathologies that can affect the spinal cord of small animals. In this field, myelopathies are a group of very frequent pathologies in the neurology office, being essential to know how to recognize their affectation, which segments are affected, and which are the possible etiologies and treatment. With this complete study, the student will learn all the developments in this field and how to apply them, with quality and safety.



“

*A high-quality program that represents the largest compilation of cutting-edge knowledge in spinal cord pathology for veterinarians in an intensive, high-quality course"*

One of the most frequent pathologies are herniated discs in dogs, this module analyzes in depth the types of hernia and their possible treatments. Inflammatory cases are of special importance, being very important the design of a correct diagnosis and treatment.

It examines the most frequent types of spinal neoplasia, their diagnosis and treatment, as well as the most common congenital anomalies and the management of spinal cord trauma.

The design of this course emphasizes two very frequent pathologies affecting the cervical spinal cord: caudal cervical spondylomyelopathy and atlantoaxial luxation, the latter being more frequent in Toy dog breeds.

The topics and clinical cases proposed, as well as their resolution, are based on both the teachers' practical experience and on the latest advances in research and development that contribute to this field of work.

All knowledge is presented through high-quality multimedia content, analysis of clinical cases prepared by the teachers, master classes and video techniques that allow the exchange of knowledge and experience, maintain and update the level of training of its members, create protocols for action and disseminate the most important developments in emergency medicine in small animal medicine.

This **Postgraduate Certificate in Spinal Cord Pathologies in Small Animals** offers the characteristics of a high level scientific, teaching and technological program. These are some of its most notable features:

- ♦ The latest technology in online teaching software
- ♦ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ♦ Practical cases presented by practising experts
- ♦ State-of-the-art interactive video systems.
- ♦ Teaching supported by telepractice
- ♦ Continuous updating and recycling systems
- ♦ Autonomous learning: full compatibility with other occupations
- ♦ Practical exercises for self-evaluation and learning verification
- ♦ Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- ♦ Communication with the teacher and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an Internet connection.
- ♦ Supplementary documentation databases are permanently available, even after the program



*From the most common pathologies, such as herniated discs, to the less frequent ones, this course will give you the opportunity to update your intervention skills in this complex field"*

“ *A complete study that includes the most frequent spinal neoplasms, with the most efficient diagnostic and treatment methods of the moment*”

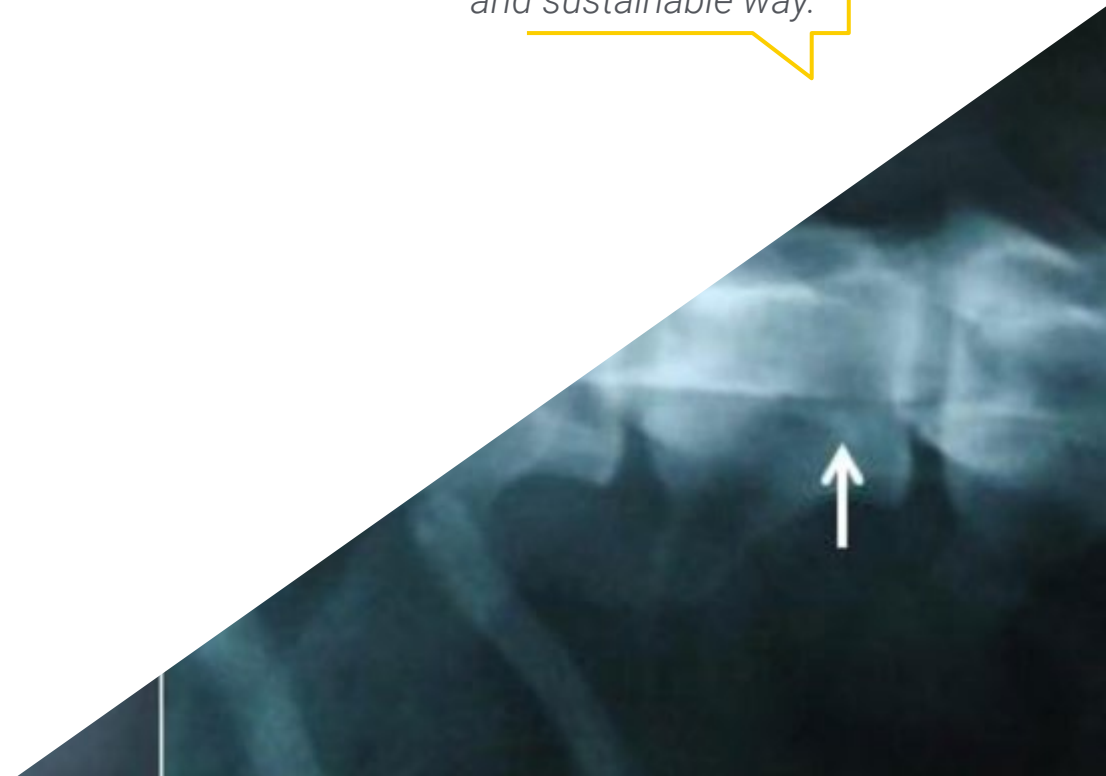
TECH's teaching staff is made up of professionals from different fields related to this specialty. In this way TECH makes sure to offer the student the update objective he/she is looking for. A multidisciplinary team of professionals trained and experienced in different environments, who will cover the theoretical knowledge in an efficient way, but, above all, will put the practical knowledge derived from their own experience into the course: one of the differential qualities of this course.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate. Developed by a multidisciplinary team of *e-learning* experts, it integrates the latest advances in educational technology. In this way, you will be able to study with a range of easy-to-use and versatile multimedia tools that will give you the necessary skills you need for your specialization.

The design of this program is based on Problem-Based Learning: an approach that views learning as a highly practical process. To achieve this remotely, we will use telepractice learning: with the help of an innovative interactive video system, and *learning from an expert*, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

*Learn from the experts, observing through high quality online systems, the actual application of the different techniques and procedures.*

*Learn at your own pace, in a process that combines intensity and flexibility to allow you to learn in a comfortable and sustainable way.*



# 02

# Objectives

Acquire in just a few weeks, the most current knowledge in terms of scientific research and technological development in diagnostic techniques and intervention in neurological pathologies in small animals. The objective is for students to generate specialized knowledge, creating a well-structured basis to identify the clinical signs associated with each neurological location and to be able to establish a list of differential diagnoses, acting correctly to achieve the best possible prognosis in patients.







“

*Include in your work capacity, the most innovative techniques in the approach to spinal cord pathologies”*



## General Objectives

---

- Reinforce concepts of localization and characteristic clinical signs of myelopathies.
- Define and present the different etiologies in myelopathies.
- Manage and treat the different types of herniated discs.
- Analyze the different diagnostic tests required and their interpretation for the different causes of spinal cord pathologies.

“

*Providing specialized care in the field of neurology will result in increased quality of care and satisfaction of your patients”*





## Specific Objectives

- ◆ Determine the management of different therapeutics for various spinal cord pathologies.
- ◆ Develop vascular, inflammatory and infectious diseases of the spinal cord.
- ◆ Outline the management of spinal trauma
- ◆ Analyze metabolic and degenerative diseases of the spinal cord.
- ◆ Identify the different types of herniated discs and their management.
- ◆ Examine congenital anomalies affecting the spinal cord, pathogenesis and treatment of caudal cervical spondylomyelopathy and atlantoaxial dislocation.

“

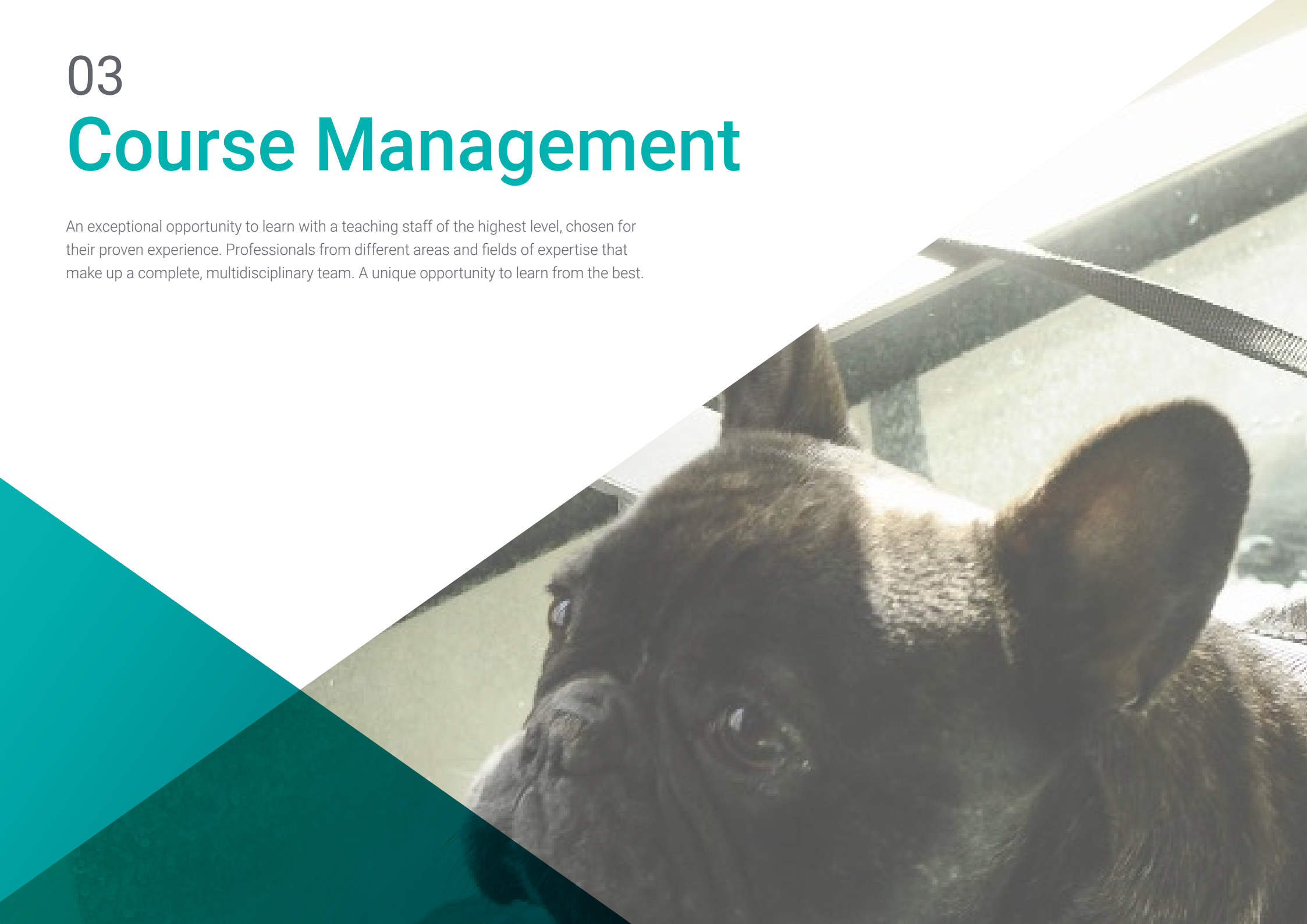
*Enroll in this program and learn from the best professionals in the industry”*



03

# Course Management

An exceptional opportunity to learn with a teaching staff of the highest level, chosen for their proven experience. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.





“

*Our teachers are experts in this field and will be in charge of accompanying you in your study, supporting your learning in a direct way"*

## Director Invitado Internacional

Dr. Steven de Decker's interest in the field of Veterinary Neurology has led him to be one of the most important figures in this area worldwide. He has participated in several international congresses, including the Singapore Vet Show, the largest veterinary conference in the Asian continent.

Such is his relevance that he has become president of the British Society of Veterinary Neurology. He is also a senior lecturer and head of the Neurology and Neurosurgery service at the Royal Veterinary College, considered one of the best veterinary institutions in the world.

His main area of research is spinal disorders and neurosurgery, having delved into the diagnosis and treatment of cervical disc-associated spondylomyelopathy or Wobbler's syndrome in dogs. His most cited studies deal with the prevalence of thoracic vertebral malformations, meningoencephalomyelitis of unknown origin and spinal arachnoid diverticula in dogs.



## Dr. De Decker, Steven

---

- Head of Neurology and Neurosurgery Service, Royal Veterinary College - Hertfordshire, United Kingdom
- Head and Professor of the Neurology and Neurosurgery Service of the Royal Veterinary College - Hertfordshire, UK
- Past President of the British Veterinary Neurological Society.
- Doctor of Veterinary Neurology and Neurosurgery, University of Ghent, Belgium
- Graduate of the University of Ghent, Belgium

“

*Thanks to TECH you will be able to learn with the world's best professionals”*

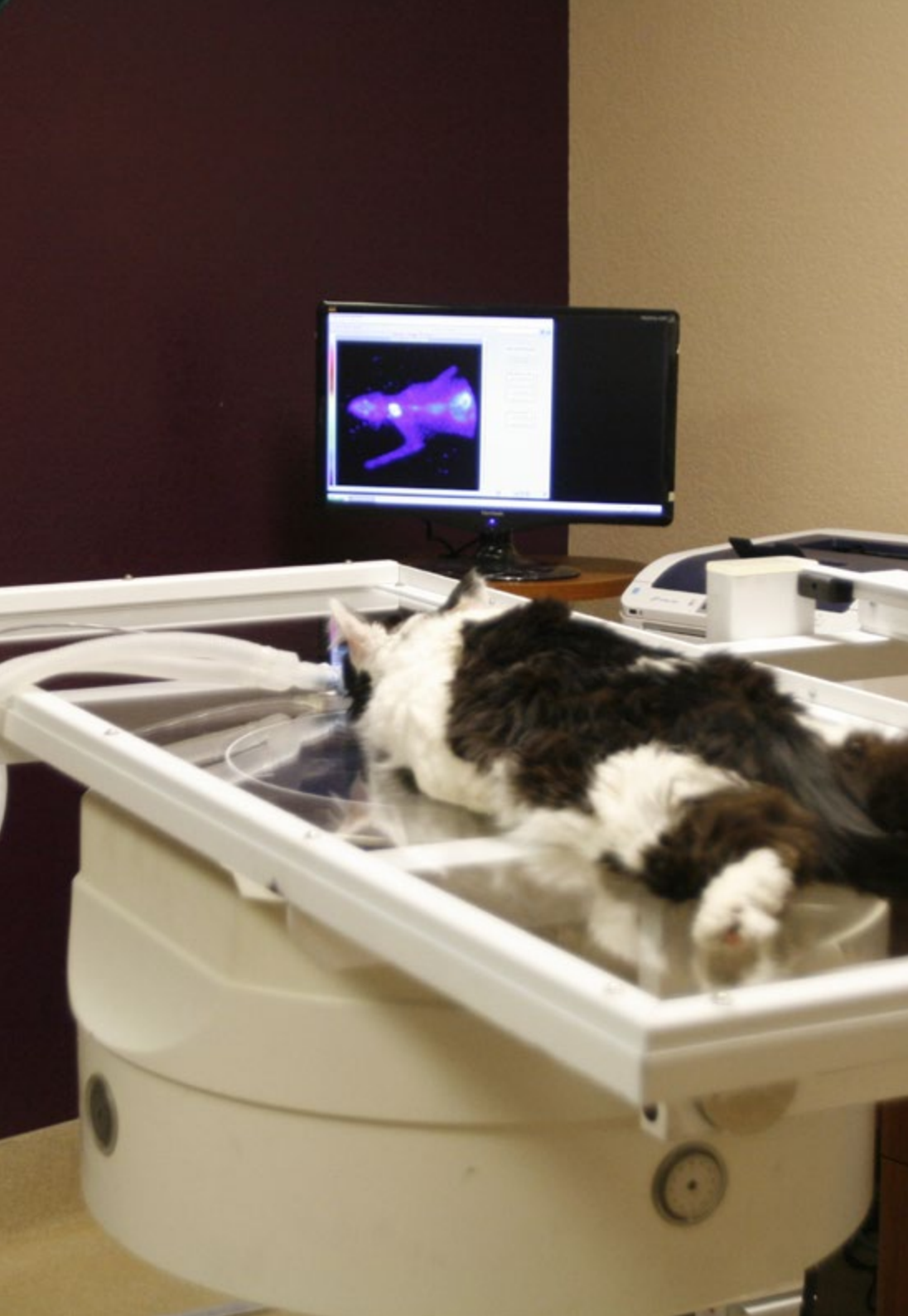
## Management



### Dr. Moya García, Sergio

- Doctoral candidate with the Chair of Surgery at the Faculty of Veterinary Medicine of Córdoba
- Miembro de Royal Collage Veterinary Surgeon (MRCVS)
- Member of the Endoscopy Group (GEA) of the Association of Veterinary Specialists in Small Animals (GEA-AVEPA) and of the Association of Veterinary Specialists in Minimally Invasive Medicine (AEVMI) and of the Neurology Group of AVEPA
- Vocal of Small Animals of the Official College of Veterinarians of Malaga since 2014
- Head of ATV training for AVEPA. Postgraduate in Neurology by the European School of Veterinary Studies Postgraduate (ESVP) Master's Degree in Clinical and Therapeutic Research from the University of Las Palmas de Gran Canaria
- Veterinary Specialist Degree in Endoscopy and Minimally Invasive Surgery by the University of Extremadura
- Assistance Director of the Vetsalud Dr. Moya Day Hospital and Head of the Neurology Department of the Bluecare Animal Hospital
- Currently pursuing neurology accreditation by AVEP





## Professors

### Dr. Ródenas González, Sergio

- ♦ Graduated from the Veterinary University of Cáceres (Uex), he did an internship in the Surgery Department of the same faculty
- ♦ Doctorate in Neurology at the Veterinary Faculty of Maisons Alfor;
- ♦ Stays in American Universities and European reference centers in Neurology and Neurology services (University of Davis California, Pennsylvania, Guelph (OVC), Animal Health Trust, etc).
- ♦ ECVN Diplomate and European specialist in veterinary neurology
- ♦ 2 years in a referral center in England (SCVS) in the Neurology and Neurosurgery Department.
- ♦ One year clinical instructor in Neurology and Neurosurgery at the Faculty of Veterinary Medicine of the University of Montreal (Canada)
- ♦ In Canada, responsible for Neurology and Neurosurgery in two referral centers while continuing his work in England for two years
- ♦ Numerous national and international publications, as well as speaker at numerous international congresses on veterinary neurology and neurosurgery



*Your teachers during the training are active specialists, specialized in the best universities and international centers: a unique occasion not to be missed"*

# 04

## Structure and Content

Through a complete and concrete syllabus, the student will go through all the essential learning areas proposed, gradually acquiring the necessary skills to put the necessary knowledge into practice. A well-developed learning scheme that will allow you to learn in a continuous, efficient and customized way.



“

*All the topics of this Postgraduate Certificate have been developed in such a way that you learn constantly, converting the study into real competences"*

## Module 1. Spinal Cord Pathologies

- 1.1. Basic Localization, Gait Disorders, Spinal Shock
  - 1.1.1. Clinical Signs Depending on Localization
  - 1.1.2. Spinal Shock and Schiff Sherrington
- 1.2. Vascular Diseases of the Spinal Cord
  - 1.2.1. Fibrocartilaginous Embolism
  - 1.2.2. Myelopathies due to Hemorrhage or Bleeding
- 1.3. Inflammatory Diseases
  - 1.3.1. Meningomyelitis Granulomatosa
  - 1.3.2. Steroid-Responsive Meningitis-Arteritis
- 1.4. Infectious Diseases
  - 1.4.1. Viral Diseases
  - 1.4.2. Bacterial Diseases
  - 1.4.3. Protozoan Diseases
  - 1.4.4. Fungal Diseases
- 1.5. Spinal Trauma
  - 1.5.1. Important Aspects
  - 1.5.2. Pathophysiology
  - 1.5.3. Congenital Anomalies of the Spinal Cord
    - 1.5.3.1. Hemivertebra
    - 1.5.3.2. Arachnoid Diverticula and other Congenital Diseases
- 1.6. Metabolic Diseases
  - 1.6.1. Primary
  - 1.6.2. Acquired
- 1.7. Spinal Cord Neoplasms
  - 1.7.1. Types of Neoplasia



- 1.8. Degenerative Myelopathy and other Degenerative Abnormalities
  - 1.8.1. Degenerative Myelopathy
  - 1.8.2. Other Degenerative Abnormalities
- 1.9. Herniated Disc
  - 1.9.1. Hansen I
  - 1.9.2. Hansen II
  - 1.9.3. ANNPE, HNPE
- 1.10. Cervical Spondylomyelopathy and Atlantoaxial Dislocation
  - 1.10.1. Etiology
  - 1.10.2. Pathogenesis and Clinical Signs

“

*Get up to date on all the areas of interest you need to update your intervention in Spinal Cord Pathologies in Small Animals”*



# 05 Methodology

This academic program offers students a different way of learning. Our methodology follows a cyclical learning process: **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. 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 program.



## 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 students have a high socio-economic profile and an average age of 43.5.

*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 adapted in audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### 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 Spinal Cord Pathologies in Small Animals guarantees students, in addition to the most rigorous 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 your **Postgraduate Certificate in Spinal Cord Pathologies in Small Animals** 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 Spinal Cord Pathologies in Small Animals**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



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



**Postgraduate Certificate**  
Spinal Cord Pathologies  
in Small Animals

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

# Postgraduate Certificate Spinal Cord Pathologies in Small Animals