

# Professional Master's Degree Minimally Invasive Veterinary Surgery in Small Animals





## Professional Master's Degree Minimally Invasive Veterinary Surgery in Small Animals

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/professional-master-degree/master-minimally-invasive-veterinary-surgery-small-animals](http://www.techtute.com/us/veterinary-medicine/professional-master-degree/master-minimally-invasive-veterinary-surgery-small-animals)

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# 01

# Introduction

The incorporation of new scientific findings has led to constant improvements in veterinary surgery, which in turn is forcing clinicians to remain consistently updated. This is particularly the case with minimally invasive techniques, which are constantly being renewed with the help of new technologies. This program is unique, in that it offers the veterinarian the latest advances in techniques such as Laparoscopy, Thoracoscopy and Endoscopy. All this, condensed into just 12 months of intensive and 100% online study.





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*You will look in depth at how the anatomy is involved in minimally invasive techniques, in gastrointestinal and urinary diseases, as well as in those related to the male and female reproductive systems”*

Minimally Invasive Techniques for the Diagnosis and Treatment of diseases in small animals were first implemented in veterinary medicine 20 years ago, and have had exponential growth in the last decade.

This upturn, which goes hand in hand with the progress made by human medicine in the field, is a result of several factors: technical development, equipment and instruments that offer higher quality images and are more affordable; the development of specific diagnostic and therapeutic techniques, as well as of professionals who are better trained and who carry out most of their clinical activities through these minimally invasive techniques, in addition to more owners who are concerned about the health of their pets, who in turn demand more specialized clinical services, more accurate clinical diagnoses and less invasive treatments, resulting in less pain and fewer hospitalizations.

The Professional Master's Degree in Minimally Invasive Veterinary Surgery in Small Animals develops up-to-date, relevant and practical knowledge on the different diseases where these techniques can be applied. Aspects of case management/approach in small animal veterinary medicine and surgery, as well as the latest minimally invasive techniques, are detailed.

This intensive program is intended to be a compilation of the different minimally invasive diagnostic and therapeutic techniques that can be performed in small animal clinics. It follows the criteria established by the authors, without overlooking scientific evidence and the most relevant updates in the field. All the chapters are accompanied by abundant iconography, and includes photos and videos by the authors which are intended to illustrate, in a very practical and useful way, handling of the different complementary tests for diagnosing cardiovascular diseases in small animals.

This **Professional Master's Degree in Minimally Invasive Veterinary Surgery in Small Animals** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ Case studies presented by experts in Minimally Invasive Veterinary Surgery in Small Animals
- ♦ The graphic, schematic, and practical contents with which they are created provide scientific and practical information on the disciplines, essential for professional development
- ♦ Latest developments in Minimally Invasive Veterinary Surgery in Small Animals
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Special emphasis on innovative methodologies in Minimally Invasive Veterinary Surgery in Small Animals
- ♦ 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 this opportunity to study the Professional Master's Degree in Minimally Invasive Veterinary Surgery in Small Animals with us" It's the perfect opportunity to advance your career"*

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*This Professional Master's Degree is the best investment you can make when choosing a refresher program to broaden your knowledge in Minimally Invasive Veterinary Surgery in Small Animals”*

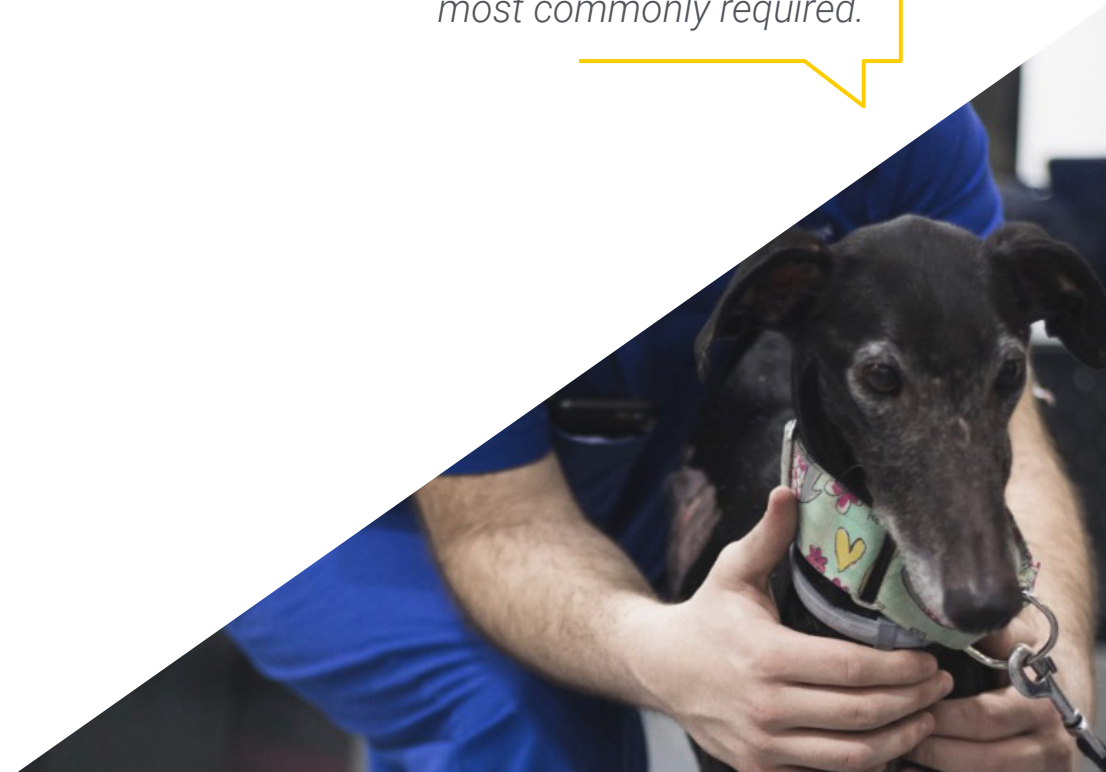
The teaching staff includes professionals from the field of Minimally Invasive Veterinary Surgery who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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 learning programmed to train 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 system of interactive videos made by experienced and renowned experts from within Veterinary Surgery.

*This specialisation comes with the best didactic material, providing you with a contextual approach that will facilitate your learning.*

*Learn to establish a diagnostic and therapeutic protocol for cases involving respiratory system diseases where diagnostic techniques and minimally invasive therapy are most commonly required.*



# 02

# Objectives

The Professional Master's Degree in Minimally Invasive Veterinary Surgery in Small Animals is aimed at facilitating the performance of the professional dedicated to veterinary medicine by focusing on the latest advances and newest treatments in the sector.







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*This is the best option to learn about the latest advances in Minimally Invasive Veterinary Surgery”*



## General Objectives

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- ♦ Analyze the history, evolution and new perspectives of minimally invasive techniques
- ♦ Detail basic and accessory equipment and instruments used in laparoscopies with small animals
- ♦ Compile a list of the techniques needed to perform laparoscopic surgery
- ♦ Develop a training program for laparoscopic surgery
- ♦ Analyze the importance of ergonomics in laparoscopic surgery
- ♦ Apply knowledge of the anatomy as it is used in minimally invasive techniques, in gastrointestinal and urinary diseases as well as in those of the male and female reproductive systems
- ♦ Establish a diagnostic and clinical protocol, using complementary tests, for gastrointestinal and urinary diseases and those of the male and female reproductive systems
- ♦ Compile different therapeutic approaches for dealing with gastrointestinal and urinary diseases and those of the male and female reproductive systems
- ♦ Analyze the suitability of different modalities of therapy, including minimally invasive therapy in gastrointestinal and urinary diseases and in those of the male and female reproductive systems
- ♦ Develop a diagnostic and therapeutic protocol for splenic masses
- ♦ Perform a revision and critical analysis of the therapeutic options for an extrahepatic portosystemic shunt
- ♦ Discuss the principal diseases that can be treated through extrahepatic biliary tract surgery
- ♦ Establish a diagnostic and therapeutic protocol for adrenal masses and canine insulinoma
- ♦ Describe anatomy of respiratory airways and their relationship with minimally invasive techniques
- ♦ Establish a diagnostic and therapeutic protocol for cases involving respiratory system diseases where diagnostic techniques and minimally invasive therapy are most commonly required
- ♦ Provide students with relevant anatomical knowledge that will allow them to perform surgical techniques on the thorax
- ♦ Establish a diagnostic and therapeutic protocol for the most common diseases in the thoracic cavity, as well as for inguinal and perineal hernias
- ♦ Integrate knowledge which allows the student to gain confidence and assurance in the different interventions described
- ♦ Evaluate the different therapeutic modalities available for treatment of surgical diseases in the thoracic cavity, as well as for inguinal and perineal hernias
- ♦ Review common complications and ensure that students acquire the knowledge required to fully overcome them
- ♦ Identify main differences between anaesthetic techniques used in laparoscopy and thoracoscopy
- ♦ Provide students with a detailed description of minimally invasive techniques used with diseases in the reproductive system and in endocrine, splenic and extrahepatic vascular surgery
- ♦ In-depth study of the indications of minimally invasive techniques versus standard techniques, as used with diseases in the reproductive system and in endocrine, splenic and extrahepatic vascular surgery
- ♦ In-depth study of the advantages and disadvantages of minimally invasive techniques, as used with certain diseases in the reproductive system and in endocrine and splenic surgery
- ♦ Analyze the therapeutic advantages of new modalities of minimal invasion in the treatment of extrahepatic portosystemic shunt
- ♦ Integrate the knowledge acquired in these new therapeutic modalities to obtain a global vision of diseases in the reproductive system, and of endocrine, splenic and extrahepatic vascular surgery
- ♦ Provide the Veterinary Clinic with the knowledge required to perform laparoscopic techniques on the urinary and digestive systems

- ◆ Perform in-depth examination of port placement and patient positioning for laparoscopic techniques used with urinary and digestive tracts
- ◆ Integrate knowledge in such a way that will allow students to gain confidence and assurance when performing laparoscopic interventions in the urinary and digestive systems
- ◆ Examine the advantages and disadvantages of using minimally invasive techniques in urinary and digestive systems, as compared to more conventional methods
- ◆ Provide students with the general surgical knowledge required to minimize perioperative complications during laparoscopic surgery of the urinary and digestive systems
- ◆ Analyze indications and patient selection for laparoscopic cholecystectomy
- ◆ Incorporate newly acquired knowledge in order to determine optimal therapeutic treatment for inguinal and perineal hernias
- ◆ Develop an understanding of thoracoscopic approach techniques and address the main complications that may occur
- ◆ Describe techniques most frequently used in thoracoscopic surgery
- ◆ Integrate knowledge in such a way that will allow students to gain confidence and assurance when performing the interventions studied in this module
- ◆ Provide students with the knowledge they require to safely perform digestive endoscopies
- ◆ Evaluate the indications, advantages, disadvantages and most common complications of a digestive endoscopy
- ◆ Compile and develop techniques to perform upper and lower digestive endoscopies
- ◆ Develop a treatment plan for the different digestive illnesses that can be treated by means of an endoscopy
- ◆ Analyze use of the endoscopy for inserting feeding tubes
- ◆ Provide students with the foundations required to safely perform respiratory endoscopies
- ◆ Evaluate the indications, advantages, disadvantages and most common complications of a respiratory endoscopy
- ◆ Develop understanding of the techniques used for a respiratory endoscopy
- ◆ Develop a treatment plan for different respiratory illnesses that can be treated by means of an endoscopy
- ◆ Analyze the use of endoscopies for the treatment of tracheal and bronchial collapse and tracheal stenosis
- ◆ Provide student with a solid foundation so that they may safely implement minimally invasive techniques in urogenital procedures
- ◆ Evaluate the indications, advantages, disadvantages and most common complications in endourological procedures
- ◆ Identify the equipment and specific instruments required to perform endourological procedures and those involving the female reproductive system
- ◆ Compile and develop techniques for performing a urogenital endoscopy
- ◆ Develop most innovative endourological procedures in veterinary medicine for small animals
- ◆ Analyze the use of an endoscopy for performing transcervical insemination



## Specific Objectives

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### Module 1. Basic Principles in a Laparoscopy

- ♦ Analyze the history and evolution of minimally invasive surgical techniques
- ♦ Identify the basic equipment and instruments needed to perform a laparoscopy
- ♦ Identify complementary material used to perform laparoscopies, such as electro-surgical units
- ♦ Develop a training program to gain the skills needed to perform a laparoscopy surgery
- ♦ Evaluate the different techniques used in the laparoscopic approach to surgery
- ♦ Identify the different complications that could arise with the laparoscopic technique
- ♦ Analyze new perspectives in laparoscopy surgery, such as single incision laparoscopy and NOTES

### Module 2. Urinary, Reproductive and Digestive System Diseases

- ♦ Carry out a detailed analysis of the anatomy and physiology of the male and female reproductive systems
- ♦ Establish a diagnostic protocol for the most common diseases of the male and female reproductive systems
- ♦ Identify existing therapeutical approaches for treating the most common diseases of the male and female reproductive systems, taking into account traditional as well as minimally invasive alternatives
- ♦ Describe the anatomy of the urinary apparatus: kidneys, ureters, bladder, urethra
- ♦ Develop a diagnostic protocol for the most common diseases in the urinary system
- ♦ Identify the different therapeutic modalities available for addressing the most common diseases in the urinary system





- ◆ Describe anatomy of the stomach, intestine, liver and spleen
- ◆ Establish a therapeutic protocol for digestive and liver diseases in small animals
- ◆ Analyze the different therapeutic options that are available to treat digestive and liver diseases

### **Module 3. Splenic, Extrahepatic, Endocrine and Upper Respiratory Tract Diseases**

- ◆ Propose a diagnostic and therapeutic plan that focuses on hemangiosarcoma to treat splenic masses
- ◆ Analyze extrahepatic portosystemic shunt disease by reviewing the controversies found in current literature on the subject
- ◆ Describe diagnostic protocol for main diseases that require a cholecystectomy as treatment
- ◆ Develop the most appropriate techniques and therapeutic plans to treat the most common diseases which affect the adrenal gland, such as adrenal tumors
- ◆ Develop the most appropriate techniques and therapeutic plans to treat the most common diseases which affect the endocrine pancreas, such as pancreatic tumors, specifically insulinoma
- ◆ Provide a detailed description of the anatomy of the nasal cavity, larynx, trachea and lungs
- ◆ Establish a diagnostic and therapeutic protocol for brachycephalic syndrome, laryngeal paralysis, nasal tumors, nasal aspergillosis and nasopharyngeal stenosis

#### **Module 4. Diseases of the Thoracic Cavity Inguinal and Perineal Hernia Anaesthesia in Laparoscopy and Thoracoscopy**

- ♦ Identify the anatomy that is clinically related to the thoracic cavity
- ♦ Establish a diagnostic protocol as well as medical and surgical treatment for tracheal collapse disease
- ♦ Identify steps for the diagnosis and treatment of pleural effusion
- ♦ Analyze the most frequent causes of pericardial effusion and its relationship with cardiac tumors
- ♦ Propose a diagnostic and therapeutic protocol for persistent right aortic arch disease
- ♦ Carry out diagnosis and expand knowledge on surgical therapy and prognosis for canine lung cancer
- ♦ Evaluate the various etiologies, diagnostic protocols, treatments and evolution of thoracic masses in small animals
- ♦ Analyze the main implications and complications that can arise in the use of anesthesia with laparoscopic or thoracoscopic procedures

#### **Module 5. Laparoscopic Techniques for the Reproductive, Endocrine, Splenic and Portosystemic Shunt Systems**

- ♦ Develop minimally invasive techniques for procedures on the female reproductive system, such as sterilization techniques, treatment of ovarian remnants and the excision of ovarian tumors
- ♦ Analyze the techniques and indications for minimally invasive insemination
- ♦ Identify the laparoscopy technique for abdominal cryptorchidism
- ♦ Describe technique and patient selection process in laparoscopic adrenalectomy
- ♦ Demonstrate laparoscopy techniques used to perform pancreatic biopsy and pancreatectomies
- ♦ Analyze minimally invasive techniques used for attenuation of the portosystemic shunt
- ♦ Address the technique and patient selection process in laparoscopic surgery for performance of a splenic biopsy and a splenectomy

#### **Module 6. Laparoscopic Techniques for the Urinary and Digestive systems**

- ♦ Develop knowledge of minimal invasion techniques to perform a laparoscopy-assisted cystoscopy
- ♦ Analyze laparoscopy techniques and indications to perform a renal biopsy
- ♦ Examine laparoscopy techniques for a ureteronephrectomy and renal cyst omentalization
- ♦ Describe advanced laparoscopic techniques as applied to the urinary system, such as ureterotomy, urethral reimplantation, and insertion of an artificial bladder sphincter
- ♦ Present the laparoscopic techniques, indications and complications involved in a liver biopsy and hepatectomy
- ♦ Demonstrate laparoscopy techniques used to perform preventative gastropexies in dogs
- ♦ Describe the laparoscopy technique as used to examine the digestive system and the removal of foreign bodies from dogs

#### **Module 7. Laparoscopic Techniques in Extrahepatic Biliary Tree, Inguinal and Perineal Hernias. Thoracoscopic Techniques. General, Pericardium, Pleural Effusion, Vascular Rings, and Mediastinal Masses**

- ♦ Develop techniques and establish a patient selection protocol to perform a cholecystectomy
- ♦ Identify the laparoscopy technique for the resolution of a inguinal hernia.
- ♦ Examine minimal invasion techniques as part of treatment of perineal hernias
- ♦ Develop an understanding of the indications, approach techniques and complications involved when performing a thoracoscopy in small animals
- ♦ Describe thoracoscopic techniques for performing pericardiectomies in dogs
- ♦ Review indications for lung biopsies and lobectomies and develop the thoracoscopic technique to perform these
- ♦ Describe the thoracoscopic technique as it used to correct a right aortic arch in dogs
- ♦ Review the different surgical options, including thoracoscopies, used to excise surgical masses

**Module 8. Digestive Endoscopy. General Information, Techniques and Most Common Diseases**

- ♦ Review the history and new perspectives of digestive endoscopies in small animals
- ♦ Identify different ways to prepare a patient for a digestive endoscopy
- ♦ Identify the equipment and specific instruments required to perform a digestive endoscopy
- ♦ Describe the correct protocol for cleaning instruments in a digestive endoscopy
- ♦ Consolidate your understanding of the indications and most common complications in a digestive endoscopy
- ♦ Establish a protocol for examination of the upper and lower gastrointestinal areas (esophagoscopy, gastroscopy, duodenoscopy, ileoscopy, colonoscopy)
- ♦ Analyze endoscopic techniques used to obtain clear resolution of digestive foreign bodies, esophageal stricture, polypectomy
- ♦ Review the use of an endoscopy for inserting feeding tubes

**Module 9. Respiratory System Endoscopy General Information, Techniques and Most Common Diseases**

- ♦ Review the history and new perspectives of respiratory endoscopies in small animals
- ♦ Identify different ways to prepare a patient for a respiratory endoscopy
- ♦ Identify the equipment and specific instruments needed to perform a respiratory endoscopy
- ♦ Describe the necessary protocol for cleaning instruments in a respiratory endoscopy
- ♦ Consolidate the understanding of the indications and most common complications of a respiratory endoscopy
- ♦ Establish a protocol for examination of the digestive tract: rhinoscopy, laryngoscopy, tracheoscopy and bronchoscopy
- ♦ Analyze endoscopic techniques for the treatment of respiratory foreign bodies and nasoesophageal stenosis
- ♦ Review the use of endoscopies for the treatment of tracheal and bronchial collapse as well as tracheal stenosis

**Module 10. Urogenital System Endoscopy General Information, Techniques and Most Common Diseases**

- ♦ Review the history and new perspectives of endourological procedures in small animals
- ♦ Identify the equipment and specific instruments needed to perform a urogenital endoscopy
- ♦ Consolidate the understanding of the indications and most common complications of a urogenital endoscopy
- ♦ Establish a protocol for examining the urinary and female reproductive system
- ♦ Review the newest endourological techniques being performed in veterinary medicine such as UGELAB, PCCL, intracorporeal lithotripsy, and urethral and urethral stenting
- ♦ Review the use of endoscopies for the treatment of tracheal and bronchial collapse as well as tracheal stenosis



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

# 03 Skills

After passing the assessments of the Professional Master's Degree in Minimally Invasive Veterinary Surgery in Small Animals, the professional will have acquired the necessary skills for a quality and up-to-date practice based on the most innovative teaching methodology.







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*This program will help you acquire the skills you need to excel in your daily work"*



## General Skills

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- ♦ Implement the techniques needed to perform laparoscopic surgery
- ♦ Apply knowledge of the anatomy as it is used in minimally invasive techniques, in gastrointestinal and urinary diseases as well as in those of the male and female reproductive systems
- ♦ Perform a revision and critical analysis of the therapeutic options for an extrahepatic portosystemic shunt
- ♦ Perform surgical techniques on the thorax
- ♦ In-depth understanding of minimally invasive techniques used to treat diseases of the reproductive system and perform endocrine, splenic and extrahepatic vascular surgery
- ♦ Perform laparoscopic techniques on the urinary and digestive systems
- ♦ Incorporate newly acquired knowledge in order to determine optimal therapeutic treatment for inguinal and perineal hernias
- ♦ Safely perform a digestive endoscopy
- ♦ Know how to safely perform a respiratory endoscopy
- ♦ Safely carry out minimally invasive techniques in urogenital procedures





## Specific Skills

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- ◆ Establish the basic equipment and instruments needed to perform a laparoscopy
- ◆ Identify existing therapeutical approaches for treating the most common diseases of the male and female reproductive systems, taking into account traditional as well as minimally invasive alternatives
- ◆ Describe the anatomy of the urinary apparatus: kidneys, ureters, bladder, urethra
- ◆ Develop a diagnostic protocol for the most common diseases in the urinary system
- ◆ Identify the different therapeutic modalities available for addressing the most common diseases in the urinary system
- ◆ Analyze extrahepatic portosystemic shunt disease by reviewing controversies found in the most recent literature on the subject
- ◆ Establish a diagnostic protocol as well as medical and surgical treatment for tracheal collapse disease
- ◆ Analyze the techniques and indications for minimally invasive insemination
- ◆ Describe advanced laparoscopic techniques as applied to the urinary system, such as ureterotomy, urethral reimplantation and insertion of an artificial bladder sphincter
- ◆ Develop techniques and establish a patient selection protocol to perform a cholecystectomy
- ◆ Identify the equipment and specific instruments required to perform a digestive endoscopy
- ◆ Identify different ways to prepare a patient for a respiratory endoscopy
- ◆ Review the history and new perspectives of endourological procedures in small animals

04

# Course Management

The program's teaching staff includes leading experts in Minimally Invasive Veterinary Surgery in Small Animals, who contribute to this program with their vast work experience. Additionally, other recognized experts have participated in its design and preparation, complementing the program in an interdisciplinary manner.



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*Leading professionals in the field have come together to teach you the latest advances in Minimally Invasive Veterinary Surgery in Small Animals"*

## International Guest Director

Dr. Matteo Rossanese is a leading veterinary surgeon who has served as Co-Director of the Soft Tissue Surgery Area at the Queen Mother's Hospital in London, United Kingdom. In fact, his career has been distinguished by his specialization in Small Animal Surgery, a field in which he has achieved notable international recognition. In this sense, he has focused on Cardiothoracic Surgery and Minimally Invasive Surgery, areas in which he has made significant contributions to advance the treatment of complex conditions in animals.

In addition to his academic and professional career, he has been involved in various research and publications. In this way, his work has focused on improving surgical techniques, with a focus on innovation and education, publishing relevant articles that have enriched knowledge in the field of Veterinary Surgery. It is worth mentioning one of them, under the title: "Ultrasound-guided hook and wire localization for surgical excision of non-palpable superficial inguinal lymph nodes in dogs: a pilot study".

He has also accumulated extensive experience in different leading institutions. As such, he began a postgraduate research project and internship in Surgery and Neurosurgery at North Downs Specialist Referrals, followed by a general internship at the Animal Health Trust. Thereafter, his teaching continued at the Small Animal Teaching Hospital, where he completed his residency in Small Animal Surgery.

Internationally, Dr. Matteo Rossanese has been recognized as an outstanding professional in his field, committed to professional excellence. Likewise, his ability to contribute significantly to veterinary practice makes him one of the great leaders in such an important field. There is no doubt that this great professional will continue to successfully face any challenge in his path.



## Dr. Rossanese Matteo

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- Co-Director of Soft Tissue Surgery at Queen Mother's Hospital, London, United Kingdom
- Co-Founder of VetSpoke LTD
- General Intern at Animal Health Trust
- Veterinary Intern at North Downs Specialist Referrals Ltd
- Veterinary Surgeon at Boso Dr. Matteo Veterinary Outpatient Clinic

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

## Management



### Dr. Ortiz Díez, Gustavo

- ♦ Head of Small Animal Unit at Complutense Clinical Veterinary Hospital
- ♦ PhD and Undergraduate Degree in Veterinary Medicine from the UCM
- ♦ Master's Degree in Research Methodology in Health Sciences from the UAB.
- ♦ Specialist in Traumatology and Orthopedic Surgery in Companion Animals by the UCM. Degree in Small Animal Cardiology from the UCM.
- ♦ Member of the scientific committee and current president of GECIRA (AVEPA's Soft Tissue Surgery Specialty Group)
- ♦ Associate Professor, Department of Animal Medicine and Surgery, Faculty of Veterinary Medicine, Complutense University of Madrid



### Dr. Casas García, Diego L.

- ♦ University Specialist in Endoscopy and Minimally Invasive Small Animal Surgery (SpecEaMIS)
- ♦ Degree in Medicine from the Autonomous University of Gran Canaria (Spain)
- ♦ Currently Studying a PhD at the University of Extremadura (Spain).
- ♦ Certificate in Internal Medicine (GPCertSAM) by the European School of Veterinary Postgraduate Studies (ESVPS)
- ♦ Certified by the University of Extremadura and the Jesús Usón Minimally Invasive Surgery Center (CCMIJU).
- ♦ Co-director of the Canary Islands Minimally Invasive Veterinary Center - CVMIC in Las Palmas de Gran Canaria (Spain). Head of Endoscopy and MIS services at CVMIC



## Professors

### Dr. Arenillas Baquero, Mario

- ◆ Degree in Veterinary Medicine from the Complutense University of Madrid
- ◆ He obtained the Diploma of Advanced Studies in 2011 and will defend the thesis for the achievement of the Doctorate in Veterinary Medicine
- ◆ Associate Professor in the Clinical Rotation of the subject "Anesthesiology" in the Veterinary Degree of the Faculty of Veterinary Medicine of the Complutense University of Madrid (UCM). As from March
- ◆ Teaches in different undergraduate and postgraduate courses related to veterinary anesthesiology, both at the university and clinical practice levels
- ◆ Veterinary Anesthesiology at the European College of Veterinary Anaesthesia and Analgesia at UCM
- ◆ Carries out teaching duties at the University and undertakes clinical and research work in anesthesia, both at the University as well as in the clinical setting
- ◆ He has been the designated veterinarian at the animal facility of the University Hospital in Getafe

### Dr. Carrillo Sánchez, Juana Dolores

- ◆ Specialist in Endoscopy and Minimally Invasive Surgery in Small Animals
- ◆ Degree in Veterinary Medicine from the University of Murcia
- ◆ Doctor from the University of Murcia
- ◆ General Practitioner Certificate in Small Animal Surgery
- ◆ Accreditation in the specialty of soft tissue surgery

### Dr. Fuertes Recuero, Manuel

- ◆ Veterinarian, Valmeda Veterinary Clinic
- ◆ Degree in Veterinary Medicine, Complutense University Madrid
- ◆ Practical Training Scholarship. Advanced internship in small animal surgery, Complutense Clinical Veterinary Hospital, Madrid. Substitution
- ◆ Veterinarian, Los Madroños Veterinary Clinic
- ◆ Veterinarian at Small Animal Clinic-Hospital, Companion Care Sprowston Vets4pets, Norwich, England

### Dr. Gutiérrez del Sol, Jorge

- ◆ Founding partner of the company Vetmi, Minimally Invasive Veterinary Medicine
- ◆ Currently Studying a PhD at the University of Extremadura
- ◆ Degree in Veterinary Medicine from the University of Extremadura
- ◆ Master's Degree in Meat Science and Technology from the University of Extremadura
- ◆ Master's Degree in Clinical Veterinary Etiology from the University of Zaragoza
- ◆ Currently studying a Postgraduate Degree in Veterinary Surgery at Barcelona University
- ◆ Lecturer for the veterinary training company, Vetability, in its Advanced Laparoscopy and Thoracoscopy courses
- ◆ Lecturer for the veterinary training company, Vetability, in its Advanced Laparoscopy and Thoracoscopy courses

**Dr. Lizasoain Sanz, Guillermo**

- ◆ Veterinarian at the Veterinary Hospital La Moraleja, Peñagrande group
- ◆ Degree in Veterinary Medicine, Complutense University Madrid
- ◆ Member of the Official College of Veterinarians of Madrid
- ◆ Mentor in the Official Mentoring Program of the Veterinary Degree Complutense University of Madrid

**Dr. Martínez Gomáriz, Francisco**

- ◆ University Specialist in Endoscopy and Minimally Invasive Small Animal Surgery (SpecEaMIS)
- ◆ PhD in Veterinary Medicine from the University of Murcia
- ◆ Degree in Veterinary Medicine from the University of Murcia
- ◆ Postgraduate Diploma in Surgery and Anaesthesia of Small Animals by the Autonomous University of Barcelona
- ◆ Associate Professor, Department of Anatomy and Embriology of the Faculty of Veterinary Medicine, University of Murcia
- ◆ Founding Partner of the Bonafé Veterinary Clinic in La Alberca. Murcia
- ◆ Director of the Centro Murciano de Endoscopia Veterinaria-CMEV, in La Alberca, Murcia,
- ◆ Postgraduate Diploma in Small Animal Surgery and Anesthesia
- ◆ Professor. Associate Anatomy and Embryology. Faculty of Veterinary Sciences. University of Murcia.





#### **Dr. Pérez Duarte, Francisco Julián**

- ◆ Secretary of AVEPA's Endoscopy Working Group (EWG).
- ◆ Founding member of the Iberian Minimally Invasive Society MINIMAL.
- ◆ Researcher at the laparoscopy unit of the Jesús Usón Minimally Invasive Surgery Center (CCMIJU)
- ◆ Collaborator teacher, UEX Department of Surgery

#### **Dr. Palacios Quirós, Nadia**

- ◆ Founder of the Veterinary Endoscopy Mobile Service
- ◆ Degree in Veterinary Medicine from the Complutense University of Madrid
- ◆ Resident, Small Animals, Veterinary Hospital of the UCM (HV-UCM)
- ◆ Founder of the Retamas Veterinary Center (Alcorcón-Madrid)
- ◆ Professor of theory and practice at the Faculty of Veterinary Medicine of the University Alfonso X El Sabio (UAX); teaches endoscopy in the area of Diagnostic Imaging
- ◆ She has completed residencies for specialization in digestive medicine, ultrasound and endoscopy at the HV-UCM

#### **Dr. Bobis Villagrà, Diego**

- ◆ Veterinarian in charge of Soft Tissue Surgery, Endoscopy and Minimally Invasive Surgery at La Salle Veterinary Center
- ◆ Doctor Cum Laude from the Department of Veterinary Medicine, Surgery and Anatomy of the University of León.
- ◆ Master's Degree in Veterinary Research and CTA University of Leon
- ◆ Master's Degree in Clinical Veterinary Practice in Hospitals Veterinary Hospital of the University of León
- ◆ Bachelor's Degree in Veterinary Medicine University of Leon
- ◆ Postgraduate in Soft Tissue Surgery, IVET Valencia
- ◆ Postgraduate in Surgery and Anaesthesia of Small Animals from the Autonomous University of Barcelona

05

# Structure and Content

The syllabus has been designed by leading professionals in the field of veterinary surgery who have extensive experience and recognized prestige in the profession, are backed by the volume of cases reviewed, studied, and diagnosed, and possess extensive knowledge of new technologies applied to veterinary medicine.





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*This Professional Master's Degree in Minimally Invasive Veterinary Surgery in Small Animals contains the most complete and up-to-date scientific program on the market”*

## Module 1. Basic Principles in a Laparoscopy

- 1.1. History of Minimally Invasive Surgery.
  - 1.1.1. History of Laparoscopy and Thoracoscopy.
  - 1.1.2. Advantages and Disadvantages.
  - 1.1.3. New Perspectives.
- 1.2. Laparoscopy Surgery Training.
  - 1.2.1. Laparoscopy Training Program.
  - 1.2.2. Skill Evaluation Systems.
- 1.3. Laparoscopy Surgery Ergonomics.
  - 1.3.1. Positioning of Surgical Equipment.
  - 1.3.2. Surgeon's Body Posture.
- 1.4. Laparoscopy Surgical Equipment. Laparoscopy Tower.
  - 1.4.1. Insufflation Gas.
  - 1.4.2. Camera Source.
  - 1.4.3. Light Source.
- 1.5. Laparoscopy Surgical Instruments.
  - 1.5.1. Trocars.
  - 1.5.2. Dissection, Cutting and Aspiration Instruments.
  - 1.5.3. Auxiliary Instruments.
- 1.6. Energy Systems.
  - 1.6.1. Physical principles |
  - 1.6.2. System Types. Monopolar, Bipolar, Sealent.
- 1.7. Laparoscopic Suture.
  - 1.7.1. Extracorporeal Suture.
  - 1.7.2. Intracorporeal Suture.
  - 1.7.3. New Systems and Suture Materials.
- 1.8. Access to the Abdomen and Creation of the Pneumoperitoneum.
  - 1.8.1. Access to the Abdomen.
  - 1.8.2. Creation of the Pneumoperitoneum.
- 1.9. Laparoscopy Surgical Complications.
  - 1.9.1. Intraoperative complications
  - 1.9.2. Immediate postoperative complications.
  - 1.9.3. Conversion

- 1.10. Single Incision Laparoscopy and NOTES.
  - 1.10.1. Basic Management and Ergonomics Principles.
  - 1.10.2. Surgical Techniques of Single Incision Laparoscopy.
  - 1.10.3. Surgical Techniques of NOTES.

## Module 2. Urinary, Reproductive and Digestive System Diseases.

- 2.1. Anatomy and Physiology of the Male and Female Reproductive System.
  - 2.1.1. Anatomy of the Female Reproductive System.
  - 2.1.2. Anatomy of the Male Reproductive System.
  - 2.1.3. Reproduction Physiology.
- 2.2. Pyometra and Stump Pyometra. Ovarian Tumors and Ovarian Remnant Syndrome.
  - 2.2.1. Pyometra.
  - 2.2.2. Stump Pyometra.
  - 2.2.3. Ovarian Remnant Syndrome.
  - 2.2.4. Ovarian Tumors.
- 2.3. Prostate and Testicles. Prostatic Hyperplasia, Prostatic Cysts, Prostatitis and Prostatic Abscesses, Prostatic Neoplasms, Testicular Neoplasms.
  - 2.3.1. Prostatic Hyperplasia.
  - 2.3.2. Cysts, Abscesses, Prostatitis.
  - 2.3.3. Prostatic Neoplasms.
  - 2.3.4. Testicular Neoplasms.
- 2.4. Urinary Anatomy.
  - 2.4.1. Kidney
  - 2.4.2. Urether
  - 2.4.3. Bladder
  - 2.4.4. Urethra
- 2.5. Urinary Stones.
  - 2.5.1. Diagnosis
  - 2.5.2. Treatment

- 2.6. Urinary Incontinence, Urinary System Tumors, Ectopic Urethters
  - 2.6.1. Urinary Incontinence
    - 2.6.1.1. Diagnosis
    - 2.6.1.2. Treatment
  - 2.6.2. Urinary System Tumors
    - 2.6.2.1. Diagnosis
    - 2.6.2.2. Treatment
  - 2.6.3. Ectopic Urethters
    - 2.6.3.1. Diagnosis
    - 2.6.3.2. Treatment
- 2.7. Digestive System
  - 2.7.1. Stomach
  - 2.7.2. Intestine
  - 2.7.3. Liver
  - 2.7.4. Bladder
- 2.8. Dilatation-Torsion Syndrome
  - 2.8.1. Diagnosis
  - 2.8.2. Treatment
- 2.9. Gastric and Intestinal Foreign Bodies
  - 2.9.1. Diagnosis
  - 2.9.2. Treatment
- 2.10. Digestive and Liver Tumors
  - 2.10.1. Diagnosis
  - 2.10.2. Treatment

### Module 3. Splenic, Extrahepatic, Endocrine and Upper Respiratory Tract Diseases

- 3.1. Splenic Masses
  - 3.1.1. Diagnosis
  - 3.1.2. Treatment
- 3.2. Portosystemic Shunt
  - 3.2.1. Diagnosis
  - 3.2.2. Treatment

- 3.3. Extrahepatic Biliary Tree Diseases
  - 3.3.1. Diagnosis
  - 3.3.2. Treatment
- 3.4. Endocrine Anatomy
  - 3.4.1. Adrenal Anatomy
  - 3.4.2. Pancreas Anatomy
- 3.5. Adrenal Glands
  - 3.5.1. Adrenal Masses
    - 3.5.1.1. Diagnosis
    - 3.5.1.2. Treatment
- 3.6. Pancreas
  - 3.6.1. Pancreatitis
  - 3.6.2. Adrenal Masses
- 3.7. Airway Anatomy
  - 3.7.1. Nostrils
  - 3.7.2. Nasal Cavity
  - 3.7.3. Larynx
  - 3.7.4. Trachea
  - 3.7.5. Lungs
- 3.8. Laryngeal Paralysis
  - 3.8.1. Diagnosis
  - 3.8.2. Treatment
- 3.9. Brachycephalic Syndrome
  - 3.9.1. Diagnosis
  - 3.9.2. Treatment
- 3.10. Nasal Tumors. Nasal Aspergillosis. Nasopharyngeal Stenosis
  - 3.10.1. Diagnosis
  - 3.10.2. Treatment

#### Module 4. Thoracic Cavity Diseases. Inguinal and Perineal Hernia. Laparoscopy and Thoracoscopy Anaesthesia

- 4.1. Tracheal Collapse
  - 4.1.1. Diagnosis
  - 4.1.2. Treatment
- 4.2. Thoracic Anatomy
  - 4.2.1. Thoracic Cavity
  - 4.2.2. Pleura
  - 4.2.3. Mediastinum
  - 4.2.4. Heart
  - 4.2.5. Oesophageal
- 4.3. Pericardial Effusion and Masses
  - 4.3.1. Diagnosis
  - 4.3.2. Treatment
- 4.4. Pleural Effusion and Chylothorax
  - 4.4.1. Etiology
  - 4.4.2. Diagnosis
  - 4.4.3. Chylothorax
    - 4.4.3.1. Diagnosis and Treatment
- 4.5. Vascular Anomalies.
  - 4.5.1. Persistent Right Aortic Arch
    - 4.5.1.1. Diagnosis
    - 4.5.1.2. Treatment
- 4.6. Pulmonary Pathologies
  - 4.6.1. Pulmonary Tumors
  - 4.6.2. Foreign Bodies
  - 4.6.3. Pulmonary Lobe Torsion
- 4.7. Mediastinal Masses
  - 4.7.1. Diagnosis and Treatment
- 4.8. Inguinal and Perineal Hernia
  - 4.8.1. Anatomy
  - 4.8.2. Inguinal Hernia
  - 4.8.3. Perineal Hernia

- 4.9. Laparoscopy Surgery Anaesthesia
  - 4.9.1. Considerations
  - 4.9.2. Complications
- 4.10. Thoracoscopy Surgery Anaesthesia
  - 4.10.1. Considerations
  - 4.10.2. Complications

#### Module 5. Laparoscopic Techniques for the Reproductive, Endocrine, Splenic and Portosystemic Shunt Systems

- 5.1. Female Sterilization Technique. Ovariectomy
  - 5.1.1. Indications
  - 5.1.2. Trocar Positioning and Placement
  - 5.1.3. Technique
- 5.2. Female Sterilization Technique. Ovariohysterectomy
  - 5.2.1. Indications
  - 5.2.2. Trocar Positioning and Placement
  - 5.2.3. Technique
- 5.3. Laparoscopic Treatment of Ovarian Remnants
  - 5.3.1. Indications
  - 5.3.2. Trocar Positioning and Placement
  - 5.3.3. Technique
- 5.4. Male Sterilization Technique
  - 5.4.1. Indications
  - 5.4.2. Trocar Positioning and Placement
  - 5.4.3. Technique
- 5.5. Laparoscopic Intrauterine Insemination
  - 5.5.1. Indications
  - 5.5.2. Trocar Positioning and Placement
  - 5.5.3. Technique
- 5.6. Excision of Ovarian Tumors
  - 5.6.1. Indications
  - 5.6.2. Trocar Positioning and Placement
  - 5.6.3. Technique



- 5.7. Adrenalectomy
  - 5.7.1. Indications
  - 5.7.2. Trocar Positioning and Placement
  - 5.7.3. Technique
- 5.8. Pancreatic Biopsy and Pancreatectomy
  - 5.8.1. Indications
  - 5.8.2. Trocar Positioning and Placement
  - 5.8.3. Technique
- 5.9. Extrahepatic Shunt
  - 5.9.1. Indications
  - 5.9.2. Trocar Positioning and Placement
  - 5.9.3. Technique
- 5.10. Splenic Biopsy and Splenectomy
  - 5.1.1. Indications
  - 5.1.2. Positioning
  - 5.1.3. Technique

## Module 6. Laparoscopic Techniques for the Urinary and Digestive systems

- 6.1. Assisted Cystoscopy by Laparoscopy
  - 6.1.1. Indications
  - 6.1.2. Trocar Positioning and Placement
  - 6.1.3. Technique
- 6.2. Renal Biopsy
  - 6.2.1. Indications
  - 6.2.2. Trocar Positioning and Placement
  - 6.2.3. Technique
- 6.3. Ureteronephrectomy
  - 6.3.1. Indications
  - 6.3.2. Trocar Positioning and Placement
  - 6.3.3. Technique
- 6.4. Omentalization of Renal Cysts
  - 6.4.1. Indications
  - 6.4.2. Trocar Positioning and Placement.
  - 6.4.3. Technique

- 6.5. Ureterotomy
  - 6.5.1. Indications
  - 6.5.2. Trocar Positioning and Placement
  - 6.5.3. Technique
- 6.6. Ureteral Reimplantation
  - 6.6.1. Indications
  - 6.6.2. Trocar Positioning and Placement
  - 6.6.3. Technique
- 6.7. Artificial Bladder Sphincter Placement
  - 6.7.1. Indications
  - 6.7.2. Trocar Positioning and Placement
  - 6.7.3. Technique
- 6.8. Liver Biopsy and Hepatectomy
  - 6.8.1. Indications
  - 6.8.2. Trocar Positioning and Placement
  - 6.8.3. Technique
- 6.9. Gastropexy
  - 6.9.1. Indications
  - 6.9.2. Trocar Positioning and Placement
  - 6.9.3. Technique
- 6.10. Extraction of Foreign Bodies from the Intestines
  - 6.10.1. Indications
  - 6.10.2. Trocar Positioning and Placement
  - 6.10.3. Technique

**Module 7.** Laparoscopic Techniques in Extrahepatic Biliary Tree, Inguinal and Perineal Hernias. Thoracoscopic Techniques. General, Pericardium, Pleural Effusion, Vascular Rings, and Mediastinal Masses

- 7.1. Cholecystectomy
  - 7.1.1. Indications
  - 7.1.2. Trocar Positioning and Placement
  - 7.1.3. Technique
- 7.2. Inguinal Hernias
  - 7.2.1. Indications
  - 7.2.2. Trocar Positioning and Placement
  - 7.2.3. Technique
- 7.3. Perineal Hernias. Cystopexy and Colopexy
  - 7.3.1. Indications
  - 7.3.2. Trocar Positioning and Placement
  - 7.3.3. Technique
- 7.4. Thorax Access
  - 7.4.1. Specific Instruments
  - 7.4.2. Animal Positioning
  - 7.4.3. Access Technique
- 7.5. Thoracoscopy Surgery Complications
  - 7.5.1. Intraoperative complications
  - 7.5.2. Postoperative Complications
- 7.6. Pulmonary Biopsy and Pulmonary Lobectomy
  - 7.6.1. Indications
  - 7.6.2. Trocar Positioning and Placement
  - 7.6.3. Technique
- 7.7. Pericardiectomy
  - 7.7.1. Indications
  - 7.7.2. Trocar Positioning and Placement
  - 7.7.3. Technique
- 7.8. Treatment of Chylothorax
  - 7.8.1. Indications
  - 7.8.2. Trocar Positioning and Placement
  - 7.8.3. Technique





- 7.9. Vascular Rings
  - 7.9.1. Indications
  - 7.9.2. Trocar Positioning and Placement
  - 7.9.3. Technique
- 7.10. Mediastinal Masses
  - 7.10.1. Indications
  - 7.10.2. Trocar Positioning and Placement
  - 7.10.3. Technique

## **Module 8.** Digestive Endoscopy. General Information, Techniques and Most Common Diseases

- 8.1. Introduction
  - 8.1.1. History of the Digestive Endoscopy
  - 8.1.2. Patient Preparation
  - 8.1.3. Contraindications and Complications
- 8.2. Equipment and Instruments
  - 8.2.1. Equipment (flexible and rigid)
  - 8.2.2. Additional Instruments (Clamps, Baskets, Hoods, Overtubes, etc.)
  - 8.2.3. Cleaning and Processing of Equipment
- 8.3. Esophagoscopy
  - 8.3.1. Indications
  - 8.3.2. Positioning
  - 8.3.3. Technique
- 8.4. Gastroscopy
  - 8.4.1. Indications
  - 8.4.2. Positioning
  - 8.4.3. Technique
- 8.5. Duodenal Ileostomy
  - 8.5.1. Indications
  - 8.5.2. Positioning
  - 8.5.3. Technique

- 8.6. Colonoscopy
  - 8.6.1. Indications
  - 8.6.2. Positioning
  - 8.6.3. Technique
- 8.7. Endoscopic Management of Foreign Bodies in the Digestive System
  - 8.7.1. Indications
  - 8.7.2. Technique
  - 8.7.3. Complications and Contraindications
- 8.8. Oesophageal Stricture
  - 8.8.1. Indications
  - 8.8.2. Technique
  - 8.8.3. Complications and Contraindications
- 8.9. Insertion of Feeding Tubes
  - 8.9.1. Indications
  - 8.9.2. Technique
  - 8.9.3. Complications and Contraindications
- 8.10. Polypectomy and Mucosectomy
  - 8.10.1. Indications
  - 8.10.2. Technique
  - 8.10.3. Complications and Contraindications

## Module 9. Respiratory System Endoscopy General Information, Techniques and Most Common Diseases

- 9.1. Introduction
  - 9.1.1. History of the Respiratory Endoscopy
  - 9.1.2. Patient Preparation
  - 9.1.3. Contraindications and Complications
- 9.2. Equipment and Instruments.
  - 9.2.1. Equipment (flexible and rigid)
  - 9.2.2. Additional Instruments (Clamps, Baskets, etc.)
  - 9.2.3. Cleaning and Processing of Equipment

- 9.3. Rhinoscopy
  - 9.3.1. Indications
  - 9.3.2. Positioning
  - 9.3.3. Technique
- 9.4. Laryngoscopy.
  - 9.4.1. Indications
  - 9.4.2. Positioning
  - 9.4.3. Technique
- 9.5. Tracheoscopy.
  - 9.5.1. Indications
  - 9.5.2. Positioning
  - 9.5.3. Technique
- 9.6. Bronchoscopy.
  - 9.6.1. Indications
  - 9.6.2. Positioning
  - 9.6.3. Technique
- 9.7. Endoscopic Management of Foreign Bodies in the Respiratory System
  - 9.7.1. Indications
  - 9.7.2. Technique
  - 9.7.3. Complications and Contraindications
- 9.8. Nasopharyngeal Stenosis
  - 9.8.1. Indications
  - 9.8.2. Technique
  - 9.8.3. Complications and Contraindications
- 9.9. Tracheal and Bronchial Collapse
  - 9.9.1. Indications
  - 9.9.2. Technique
  - 9.9.3. Complications and Contraindications
- 9.10. Tracheal Stenosis
  - 9.10.1. Indications
  - 9.10.2. Technique
  - 9.10.3. Complications and Contraindications

**Module 10. Urogenital System Endoscopy General Information, Techniques and Most Common Diseases**

- 10.1. Introduction
  - 10.1.1. History of the Urinary Endoscopy
  - 10.1.2. Patient Preparation
  - 10.1.3. Contraindications and Complications
- 10.2. Equipment and Instruments.
  - 10.2.1. Equipment (flexible and rigid)
  - 10.2.2. Additional Instruments (Laser, Pincers, Baskets, Fibers, Hydrophilic Guides, Stents, etc.)
  - 10.2.3. Cleaning and Processing of Equipment
- 10.3. Urethrocystoscopy
  - 10.3.1. Indications
  - 10.3.2. Positioning
  - 10.3.3. Technique
- 10.4. PCCL
  - 10.4.1. Indications
  - 10.4.2. Positioning
  - 10.4.3. Technique
- 10.5. Percutaneous Nephroscopy
  - 10.5.1. Indications
  - 10.5.2. Positioning
  - 10.5.3. Technique
- 10.6. Vaginoscopy
  - 10.6.1. Indications
  - 10.6.2. Positioning
  - 10.6.3. Technique
- 10.7. UGELAB- Ultrasound-Guided Endoscopic Laser Ablation
  - 10.7.1. Indications
  - 10.7.2. Technique
  - 10.7.3. Complications and Contraindications
- 10.8. Transcervical Insemination
  - 10.8.1. Indications
  - 10.8.2. Technique
  - 10.8.3. Complications and Contraindications
- 10.9. Ureteral Stents
  - 10.9.1. Indications
  - 10.9.2. Technique
  - 10.9.3. Complications and Contraindications
- 10.10. Intracorporeal Lithotripsy
  - 10.10.1. Indications
  - 10.10.2. Technique
  - 10.10.3. Complications and Contraindications



*This training will allow you to advance in your career comfortably"*

# 06 Methodology

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

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





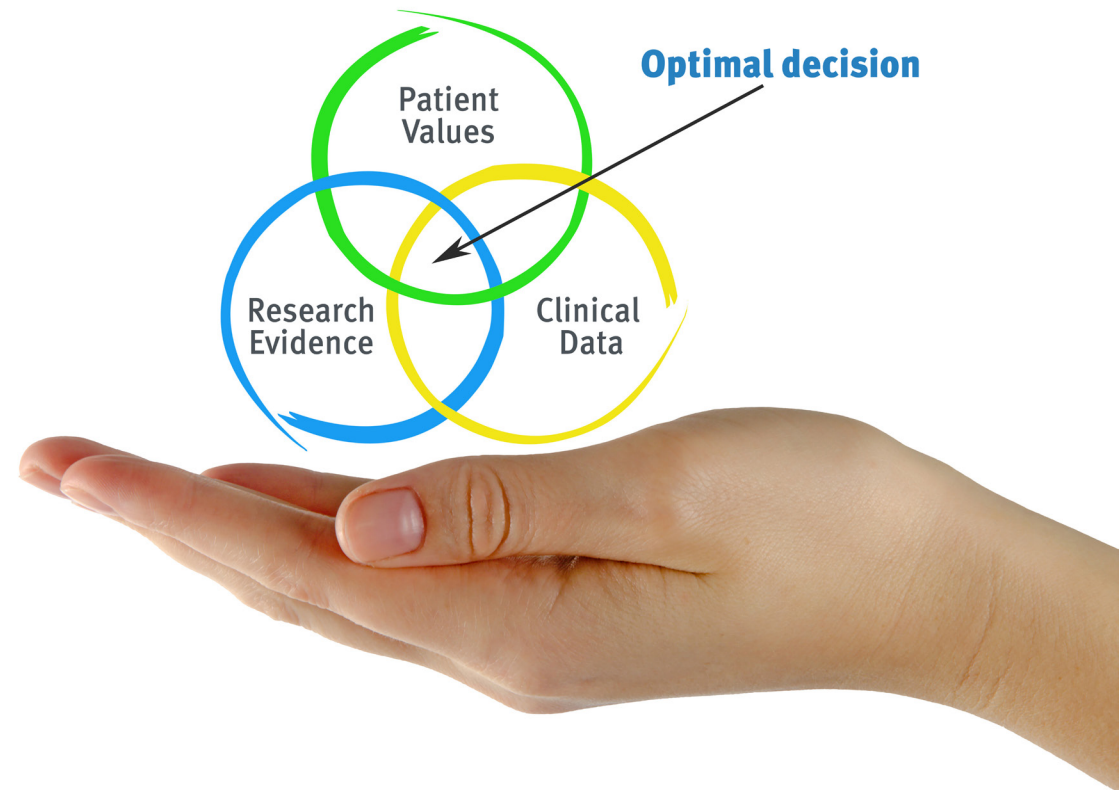
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program 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.



07

# Certificate

The Professional Master's Degree in Minimally Invasive Veterinary Surgery in Small Animals guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree diploma issued by TECH Technological University.



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

This **Professional Master's Degree in Minimally Invasive Veterinary Surgery 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 **Professional Master's Degree** diploma issued by **TECH Technological University** via tracked delivery.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Professional Master's Degree in Minimally Invasive Veterinary Surgery in Small Animals**

Modality: **online**

Duration: **12 months**



\*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.



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



## Professional Master's Degree

Minimally Invasive  
Veterinary Surgery  
in Small Animals

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

Professional Master's Degree  
Minimally Invasive Veterinary  
Surgery in Small Animals

