

# Postgraduate Diploma

Corneal, Crystalline Lens, Uveal and  
Retinal Surgery in Small Animals





## Postgraduate Diploma Corneal, Crystalline Lens, Uveal and Retinal Surgery in Small Animals

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-corneal-crystalline-lens-uveal-retinal-surgery-small-animals](http://www.techtute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-corneal-crystalline-lens-uveal-retinal-surgery-small-animals)

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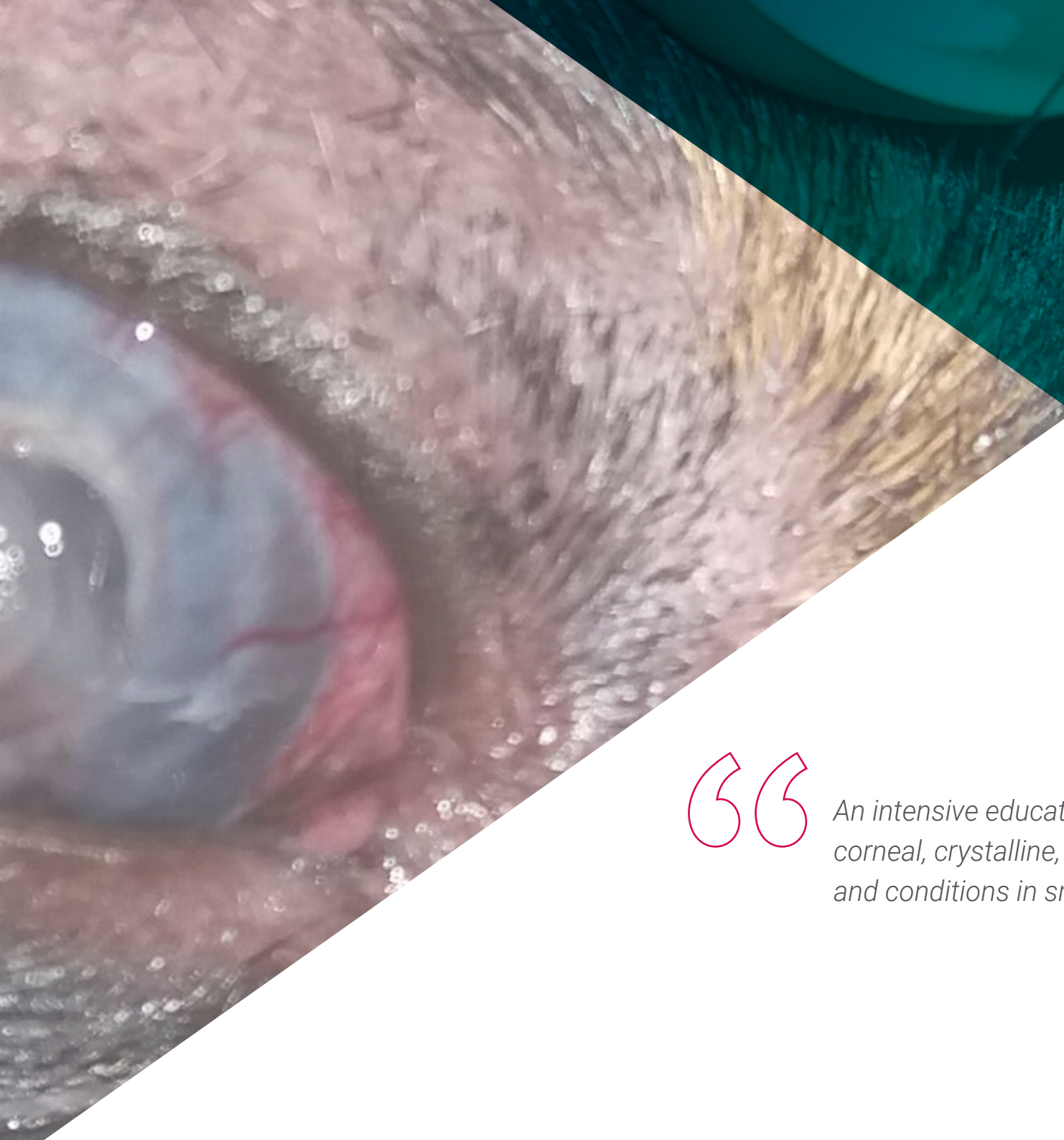
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# 01

# Introduction

In veterinary care, the care of ophthalmological conditions requires the professional to have the broadest and most specific knowledge of the diseases that affect the different species of small animals. This program is a compilation of learning techniques and processes that are applied in the intervention through corneal, crystalline lens, uveal and retinal surgery. An opportunity for professional growth that will allow students to boost their skills and competitiveness in the field.





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*An intensive education in the surgery of corneal, crystalline, uveal and retinal lesions and conditions in small animal ophthalmology"*

The cornea is one of the most exposed and visible areas, and any alteration can be detected very quickly. Each corneal component heals to a different degree, at a different speed and by completely different mechanisms. Understanding these differences will help us to identify if the repair is occurring abnormally, in order to intervene early and improve the prognosis of our patients.

This Postgraduate Diploma develops specialized knowledge about the different diagnostic methods and their indications and includes learning the basic and necessary instruments for a complete ophthalmological examination. The complete ophthalmological examination will be approached starting with the anamnesis, the clinical history of the patient up to the different procedures that can be used to reach a correct diagnosis. We examine the most important procedures, tests and devices that facilitate accurate diagnosis.

In addition, the keys will be presented so that the student can approach one of the most complex phases of the ophthalmological examination: the identification of changes in color, edges and visual "texture", and their association to each corneal pathology and clinical relevance.

For all these reasons, this is the most complete Postgraduate Diploma that students will find in the market, and it also includes an online methodology that will allow them to learn from the comfort of the place of their choice, without schedules and without time limits. Through state-of-the-art audiovisual content, this revolutionary methodology will turn the graduate into an Expert in Eye Surgery in Small Animals.

A world-renowned expert will join this educational itinerary. TECH has invited a renowned veterinary ophthalmology researcher to serve as the International Guest Director of this program. Likewise, this specialist is responsible for teaching a series of comprehensive Masterclasses where the main therapeutic and surgical advances in animal eye diseases are covered.

This **Postgraduate Diploma in Surgery of Corneal, Crystalline Lens, Uveal and Retinal in Small Animals** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Veterinary Ophthalmology
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*The International Guest Director of this program will update you on the most cutting-edge corneal healing technique in animals”*

“

*Stand out from other professionals with the ability to care for small animal eye diseases”*

The program's teaching staff includes professionals from the industry who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to prepare for real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*A process of total quality growth that will allow you to specialize in a field of great interest and demand.*

*With an intensive and efficient process, this Postgraduate Diploma will lead students to acquire theoretical and practical knowledge quickly and in a way that is compatible with other obligations.*



# 02 Objectives

The main objective of this Postgraduate Diploma is to provide veterinarians with specialized knowledge on corneal, crystalline lens and uveal surgery in veterinary ophthalmology. In order to achieve this, TECH has designed the most complete and up-to-date educational program on the market. In this way, and after completing the 720 hours of study included in the Postgraduate Diploma, the professional will be able to practice in this exciting field of work with total success and from a perspective based on the utmost scientific rigor, the greatest relevance and the highest relevance in the subject.







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*Take a leap to the next level and  
boost your ability to provide care in  
small animal ophthalmology”*



## General Objectives

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- ♦ Identify the surgical equipment and devices used in ophthalmological surgery
- ♦ Develop an orderly examination protocol
- ♦ Analyze common examination techniques for obtaining further information
- ♦ Examine the normal anatomy and function of the orbital and periocular tissues
- ♦ Develop a systematic diagnostic protocol in corneal and scleral disorders
- ♦ Analyze pathological changes in the cornea and sclera and their clinical relevance
- ♦ Determine the differential diagnosis in corneal and scleral disorders
- ♦ Establish the medical and/or surgical therapeutic possibilities and prognosis for each corneal and scleral pathology
- ♦ Incorporate new developments in the diagnosis and treatment of lens pathologies
- ♦ Examine the pathophysiology
- ♦ Develop specialized knowledge on congenital and acquired pathologies
- ♦ Generate skills for the surgical approach and more advanced techniques for lens pathologies
- ♦ Determine the structures involved in uveal inflammation
- ♦ Analyze the involvement of systemic diseases and uveal disease
- ♦ Develop a diagnostic plan according to the uveal alterations observed in the patient
- ♦ Review the ophthalmologic examination for the diagnosis of anterior uveitis
- ♦ Discuss how to localize the primary involvement of the uveal abnormality
- ♦ Determine whether the disease is ophthalmological or systemic
- ♦ Establish the differential diagnosis according to systemic and eye clinical signs
- ♦ Propose possible complementary tests according to the established differential diagnosis
- ♦ Present and establish a treatment plan to deal with uveal disease in our patient
- ♦ Establish a possible protocol for retinal lesions secondary to systemic conditions



*You are just one step away from achieving your career goals”*



## Specific Objectives

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### Module 1. Ophthalmological Examination and Complementary Tests

- ♦ Optimize the gathering of data from the patient's anamnesis, as well as from the basic examination tests
- ♦ Demonstrate the uses and information that the correct use of the slit lamp offers us
- ♦ Evaluate the advantages and disadvantages of direct and indirect ophthalmoscopy
- ♦ Establish the basis for the correct use of tonometry and gonioscopy
- ♦ Analyze the different possibilities for anterior and posterior segment imaging for the objective follow-up of our patients' lesions
- ♦ Determine the principles of diagnostic imaging
- ♦ Examine the drugs for specific exploratory procedures

### Module 2. Corneal Diseases and Surgery

- ♦ Analyze physiologic corneal repair mechanisms
- ♦ Accurately recognize changes in color, borders and visual "texture" characteristic of each corneal pathologic response
- ♦ Classify and categorize corneal ulcers
- ♦ Develop the general and specific treatment principles for each type of corneal ulcer
- ♦ Describe the different corneal surgical techniques and evaluate their advantages and disadvantages
- ♦ Compile and elaborate on the most common non-ulcerative corneal pathologies in dogs and cats
- ♦ Identify the various corneal manifestations of systemic diseases
- ♦ Introduce the different neoplasms of corneal localization
- ♦ Develop the disorders that can affect the sclera and their treatment

### Module 3. Lens Diseases and Surgery

- ♦ Identify advances in the approach to cataract surgery
- ♦ Compile the basis for setting up an operating room for microsurgery
- ♦ Identify the use of different drugs for intraocular surgery
- ♦ Offer tips for the management of intraoperative, preoperative and postoperative complications of lens surgery

### Module 4. Uveal and Retinal Diseases and Surgery

- ♦ Determine the structures involved in uveal inflammation
- ♦ Analyze the involvement of systemic diseases and uveal disease
- ♦ Develop a diagnostic plan according to the uveal alterations observed in the patient
- ♦ Review the ophthalmological examination for the diagnosis of anterior uveitis
- ♦ Discuss how to localize the primary involvement of the uveal abnormality
- ♦ Determine whether the disease is ophthalmological or systemic
- ♦ Establish the differential diagnosis according to systemic and eye clinical signs
- ♦ Propose possible complementary tests according to the established differential diagnosis
- ♦ Present and establish a treatment plan to deal with uveal disease in our patient
- ♦ Establish a possible protocol for retinal lesions secondary to systemic conditions When faced with a blind eye, discern whether the problem is retinal or neurological

03

# Course Management

In its commitment to offer an elite education for all, TECH counts on renowned professionals so that the student acquires a solid knowledge in the specialty of Veterinary Ophthalmology. That is why this Postgraduate Diploma has a highly qualified and experienced team in the field, a team that is capable of offering the best possible resources for students in the development of their skills throughout the program. In this way, the veterinarian counts with the guarantees required to specialize at an international level in a booming sector that will catapult them to professional success.



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*During your apprenticeship you will be accompanied by professionals internationally renowned”*

## International Guest Director

Dr. Caryn Plummer is a true international reference in the field of Veterinary Medicine. Her research interests include corneal wound healing, glaucoma and other aspects of Clinical Ophthalmology in animals. She has also developed different models of diseases that afflict the eyesight of pets.

The lectures of this expert are widely recognized and expected in the academic framework, developing many of these in the United States, the University of Copenhagen and other parts of the world. She is also a member of the School of Veterinary Medicine at the University of Florida.

Other lines in which this expert has completed her professional development are Pharmacology and the use of medical devices through administration and ocular penetration. In the same way, she has deepened her knowledge in Equine Corneal Disease, Primary Open Angle Glaucoma in the Dog and other immune-mediated pathologies. In turn, Plummer has ventured into the application of new surgical techniques for the healing of corneal wounds, facial reconstruction of animal eyelids and the prolapse of nictitating glands. On these topics he has published a large number of articles in leading journals such as Veterinary ophthalmology and American journal of veterinary research.

Dr. Plummer's professional development has also been intensive and regular. Her specialization in Veterinary Ophthalmology was developed at the University of Florida. She also completed her advanced education in Small Animal Medicine and Surgery at Michigan State University.

On the other hand, this scientist has received several awards, among them the Clinical Researcher of the Year Award, granted by the Florida Veterinary Medical Association. She is also the author of Gelatt's classic textbook Veterinary Ophthalmology and an associate editor.



## Dr. Plummer, Caryn

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- Research Fellow in Veterinary Ophthalmology at the University of Florida
- Veterinary Ophthalmologist specialized in Glaucoma and Corneal Disease in Small Animals
- Founder and Secretary/Treasurer of the International Consortium for Equine Ophthalmology
- Treasurer of the Consortium for Animal Vision Foundation
- Author of the classic Gelatt textbook Veterinary Ophthalmology
- Diplomate of the American College of Veterinary Ophthalmology
- Residency in Comparative Ophthalmology at the University of Florida
- Practical Instruction in Veterinary Medicine at the University of Michigan
- Bachelor of Arts Degree from Yale University
- Member of: Florida Veterinary Medical Association



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

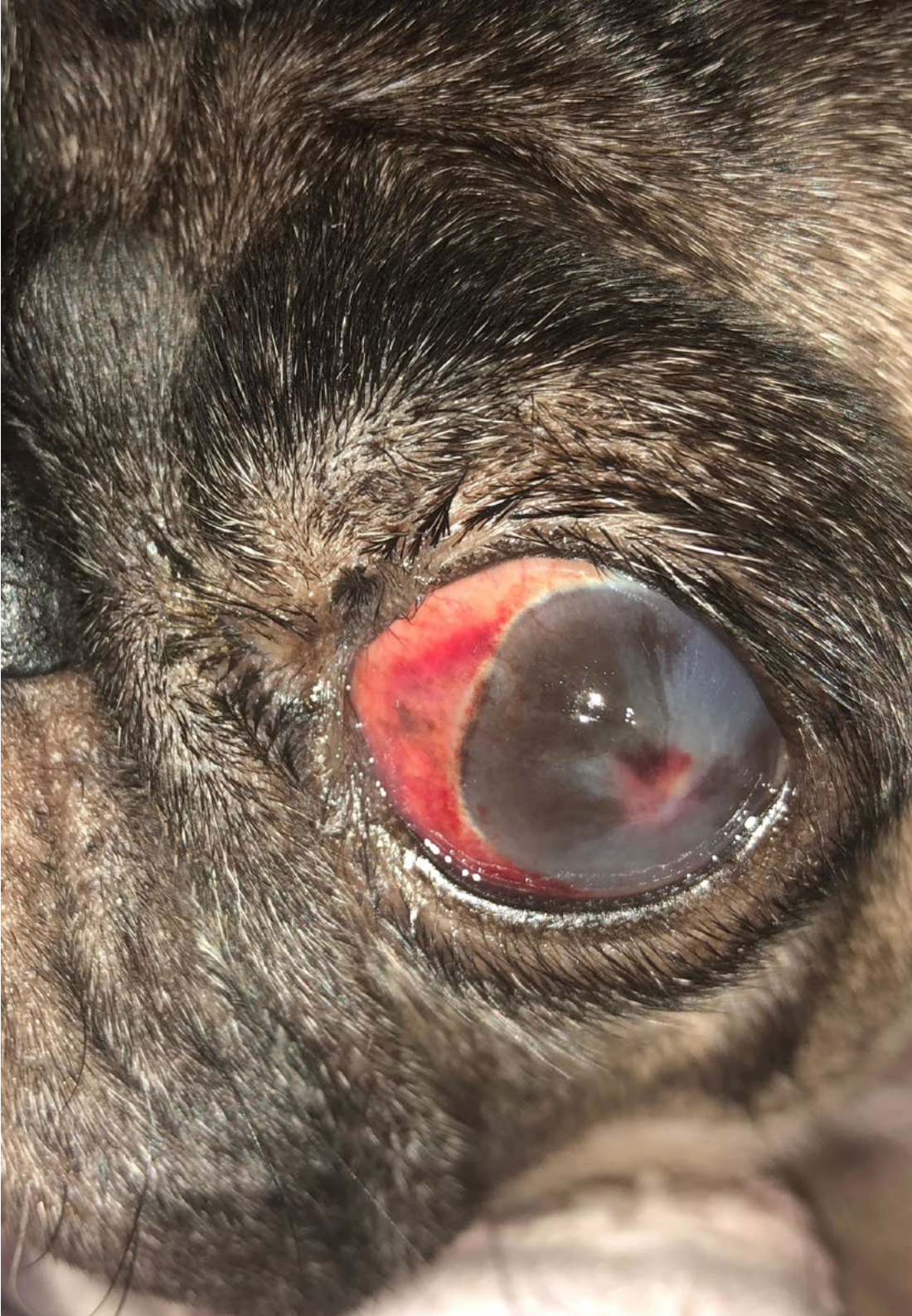
## Management



### Dr. Fernández Más, Uxue

- ♦ Head of the Ophthalmology Service of the Vidavet Group
- ♦ Veterinary Ophthalmologist at the IVO
- ♦ Veterinarian in Internal Medicine, Surgery and Ophthalmology at the Vidavet Veterinary Center
- ♦ Emergency Veterinarian at the Sagrada Familia Veterinary Clinic
- ♦ Degree in Medicine and Surgery of Small Animals and Companion Animals at the University of Zaragoza
- ♦ Postgraduate in Veterinary Ophthalmology at the Autonomous University of Barcelona
- ♦ Teacher in Introductory Courses in Veterinary Ophthalmology for the Vidavet Group
- ♦ Presentations at SEOVET, ECVO and GTA of AVEPA congresses
- ♦ Member of: SEOVET and AVEPA's Ophthalmology Group





## Professors

### Dr. Gómez Guajardo, Magda Berenice

- ◆ Professional Veterinarian at the Eye Clinic Veterinary Hospital.
- ◆ Degree in Veterinary Medicine from the Autonomous University of Nuevo León
- ◆ Graduated in the Latin American College of Veterinary Ophthalmology
- ◆ Advanced Corneal Surgical Techniques and Instrumentation, 43rd Annual Scientific Meeting of The American College of Veterinary Ophthalmology
- ◆ Ophthalmology Refresher Program. Glaucoma, Challenges and singularities

### Dr. Martínez Gassent, María

- ◆ Clinical Veterinarian in the Ophthalmology Service at AniCura Ars Veterinaria Veterinary Hospital
- ◆ Specialty Internship in the Ophthalmology Service at AniCura Ars Veterinaria Veterinary Hospital
- ◆ Self-employed, creator and General Veterinarian at Nomavet Veterinary Clinic. Valencia
- ◆ Collaborating Professor in the Department of Animal Medicine and Surgery at the CEU Cardenal Herrera University
- ◆ Degree in Veterinary Medicine from CEU Cardenal Herrera University
- ◆ Diploma in Surgery and Anesthesia of Small Animals from the Autonomous University of Barcelona
- ◆ Postgraduate Course in Ocular Surgery and Pathology at the Autonomous University of Barcelona
- ◆ Basic Science Program in Veterinary Ophthalmology at the University of North Carolina

**Dr. Torres Caballero, María Dolores**

- ♦ Head of the Ophthalmology Service at the Montjuic Veterinary Hospital. Barcelona
- ♦ Head of the Ophthalmology Service at AniCura Ars Veterinaria Veterinary Hospital
- ♦ Itinerant Ophthalmology Service of Barcelona
- ♦ Degree in Veterinary Medicine from the University of Córdoba
- ♦ University Diploma in Experimental Microsurgery at the Faculty of Medicine of the University of Paris
- ♦ University Diploma in Electrophysiology of Vision at the University of Paris
- ♦ European Residency ECVO at the Autonomous University of Barcelona
- ♦ Program of Advanced Studies in Veterinary Ophthalmology. Toulouse, France
- ♦ Teaching in Specialization Courses in Veterinary Ophthalmology
- ♦ Presentation of Training Courses for General Veterinarians in different locations in the Iberian Peninsula
- ♦ Member of: Spanish Society of Veterinary Ophthalmology





**Dr. Simó Domenech, Francisco José**

- ◆ Medical Director and Creator at the Instituto Veterinario Oftalmológico (IVO)
- ◆ Veterinary Ophthalmologist at Long Island Veterinary Specialists. New York
- ◆ Collaboration with the R&D Department of Alcon Laboratories. El Masnou, Spain
- ◆ Collaborations in the experimental center of Harlan Laboratories
- ◆ Degree in Veterinary from the University of Zaragoza
- ◆ Postgraduate degree in Veterinary Ophthalmology from the Autonomous University of Barcelona
- ◆ Residencies at the Veterinary Faculty of Toulouse, with Dr. Marc Simon in Paris and at the Ophthalmology Service of Long Island Veterinary Specialists in New York
- ◆ Accredited by the Asociación de Veterinarios Españoles Especialistas en Pequeños Animales (AVEPA) as a Specialist in Veterinary Ophthalmology
- ◆ Member of: Spanish Society of Veterinary Ophthalmology (SEOVET)



*Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"*

# 04

## Structure and Content

For this Postgraduate Diploma, a group of veterinary professionals of the highest level have designed the most complete and in-depth set of contents on the educational market. As a result, after enrolling in this program, the students will have a series of materials in multimedia format and with a practical theoretical approach that will help them learn everything they need to successfully practice as a veterinary ophthalmologist. A unique academic opportunity based on the best teaching methodology that will elevate the professionals to the top of their careers.





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*The drive for up-to-date, cutting edge education that will put your CV at the forefront of the labor market”*

## Module 1. Ophthalmological Examination and Complementary Tests

- 1.1. Ophthalmological Examination
  - 1.1.1. Remote Ophthalmological Examination
  - 1.1.2. Medical History
  - 1.1.3. Clamping Methods
  - 1.1.4. Basic Instruments for Ophthalmological Examination
- 1.2. Direct and Indirect Ophthalmoscopy
  - 1.2.1. Direct Examination
    - 1.2.1.1. Palpebral Reflex
    - 1.2.1.2. Menace Response
    - 1.2.1.3. Dazzle Reflex
    - 1.2.1.4. Pupillary Light Reflex
    - 1.2.1.5. Corneal Reflex
  - 1.2.2. Biomicroscopy
  - 1.2.3. Direct Ophthalmoscopy
  - 1.2.4. Indirect Ophthalmoscopy
    - 1.2.4.1. Monocular Indirect Ophthalmoscopy
- 1.3. Ophthalmical Examination Tests
  - 1.3.1. Schirmer Test
  - 1.3.2. Fluorescein Test
    - 1.3.2.1. Fluorescein Test
    - 1.3.2.2. *Break Up Time (BUT)*
    - 1.3.2.3. Jones Test
    - 1.3.2.4. Seidel Test
  - 1.3.3. Rose Bengal
  - 1.3.4. Lissamine Green
- 1.4. Tonometry
  - 1.4.1. Indentation Tonometry
  - 1.4.2. Applanation Tonometry
  - 1.4.3. Rebound Tonometry





- 1.5. Gonioscopy
  - 1.5.1. Direct Gonioscopy
  - 1.5.2. Indirect Gonioscopy
- 1.6. Cytology and Biopsy
  - 1.6.1. Cytology Sampling
    - 1.6.1.1. Conjunctival Cytology
    - 1.6.1.2. Corneal Cytology
    - 1.6.1.3. Aqueous Humor Cytology
    - 1.6.1.4. Vitreous Cytology
  - 1.6.2. Biopsy Sampling
- 1.7. Ocular Ultrasound
  - 1.7.1. Anterior Segment Ultrasound
  - 1.7.2. Posterior Segment Ultrasound
  - 1.7.3. Orbit Ultrasound
- 1.8. Optical Coherence Tomography (OCT)
  - 1.8.1. Corneal OCT
  - 1.8.2. Iridocorneal Angle
  - 1.8.3. Retinal OCT
- 1.9. Electroretinography
  - 1.9.1. Electroretinography (ERG)
  - 1.9.2. Electroretinography Technique
  - 1.9.3. ERG Applications
- 1.10. Other Diagnostic Imaging
  - 1.10.1. MRI and CT
  - 1.10.2. Fluorescein Angiography
  - 1.10.3. Pachymetry
  - 1.10.4. Meibography

## Module 2. Corneal Diseases and Surgery

- 2.1. Physiology of the Cornea
  - 2.1.1. Clarity. Corneal Transparency
  - 2.1.2. Corneal Wound Healing
    - 2.1.2.1. Proteases and Protease Inhibitors in the Corneal Wound Healing Process
    - 2.1.2.2. Proteinases
  - 2.1.3. Corneal Epithelial, Endothelial Pigmentation
  - 2.1.4. Corneal Edema, Corneal Vascularization
- 2.2. Congenital and Developmental Diseases
  - 2.2.1. Microcornea. Megalocornea
  - 2.2.2. Dermoid Cysts
  - 2.2.3. Congenital Opacities. Persistent Pupillary Membranes
  - 2.2.4. Coloboma. Staphyloma
- 2.3. Inflammatory Keratopathies
  - 2.3.1. Ulcerative Keratitis
  - 2.3.2. Bacterial Keratitis
  - 2.3.3. Viral Keratitis
  - 2.3.4. Mycotic Keratitis
- 2.4. Corneal Ulcers
  - 2.4.1. Ulcer Depth Identification
  - 2.4.2. Spontaneous Chronic Corneal Epithelial Defects (SCCEDs)
- 2.5. Corneal Surgery
  - 2.5.1. Corneal Adhesives
  - 2.5.2. Conjunctival Tissue
  - 2.5.3. Use of Biological Membranes
  - 2.5.4. Keratoplasties
- 2.6. Non-Ulcerative Keratitis
  - 2.6.1. Pigmentary Keratitis
  - 2.6.2. Chronic Superficial Keratitis
  - 2.6.3. Keratitis Punctata
  - 2.6.4. Marginal Keratitis
  - 2.6.5. Keratitis Punctata
  - 2.6.6. Neurogenic Keratitis

- 2.7. Non-Inflammatory Keratopathies
  - 2.7.1. Corneal Dystrophies
  - 2.7.2. Lipid Keratopathy
  - 2.7.3. Corneal Degeneration
  - 2.7.4. Endothelial Dystrophy
  - 2.7.5. Florida Keratopathy
  - 2.7.6. Surgery for Keratopathies
- 2.8. Corneal Neoplasms
  - 2.8.1. Neoplasms in Dogs
  - 2.8.2. Neoplasms in Cats
- 2.9. Sclera
  - 2.9.1. Structure and Function
  - 2.9.2. Inflammatory Diseases
    - 2.9.2.1. Episcleritis
      - 2.9.2.1.1. Nodular Granulomatous
  - 2.9.3. Scleritis
    - 2.9.3.1. Non-Necrotizing
    - 2.9.3.2. Necrotizing
  - 2.9.4. Trauma. Laceration
- 2.10. Cross Linking. Cryotherapy
  - 2.10.1. Cross Linking and Cryotherapy
  - 2.10.2. Keratopathies Treated with Cross Linking
  - 2.10.3. Keratopathies Treated with Cryotherapy

## Module 3. Lens Diseases and Surgery

- 3.1. Embryology and Anatomy
  - 3.1.1. Embryology
  - 3.1.2. Anatomy
- 3.2. Crystalline Lens Examination
  - 3.2.1. Crystalline Lens Examination
  - 3.2.2. Advanced Examination

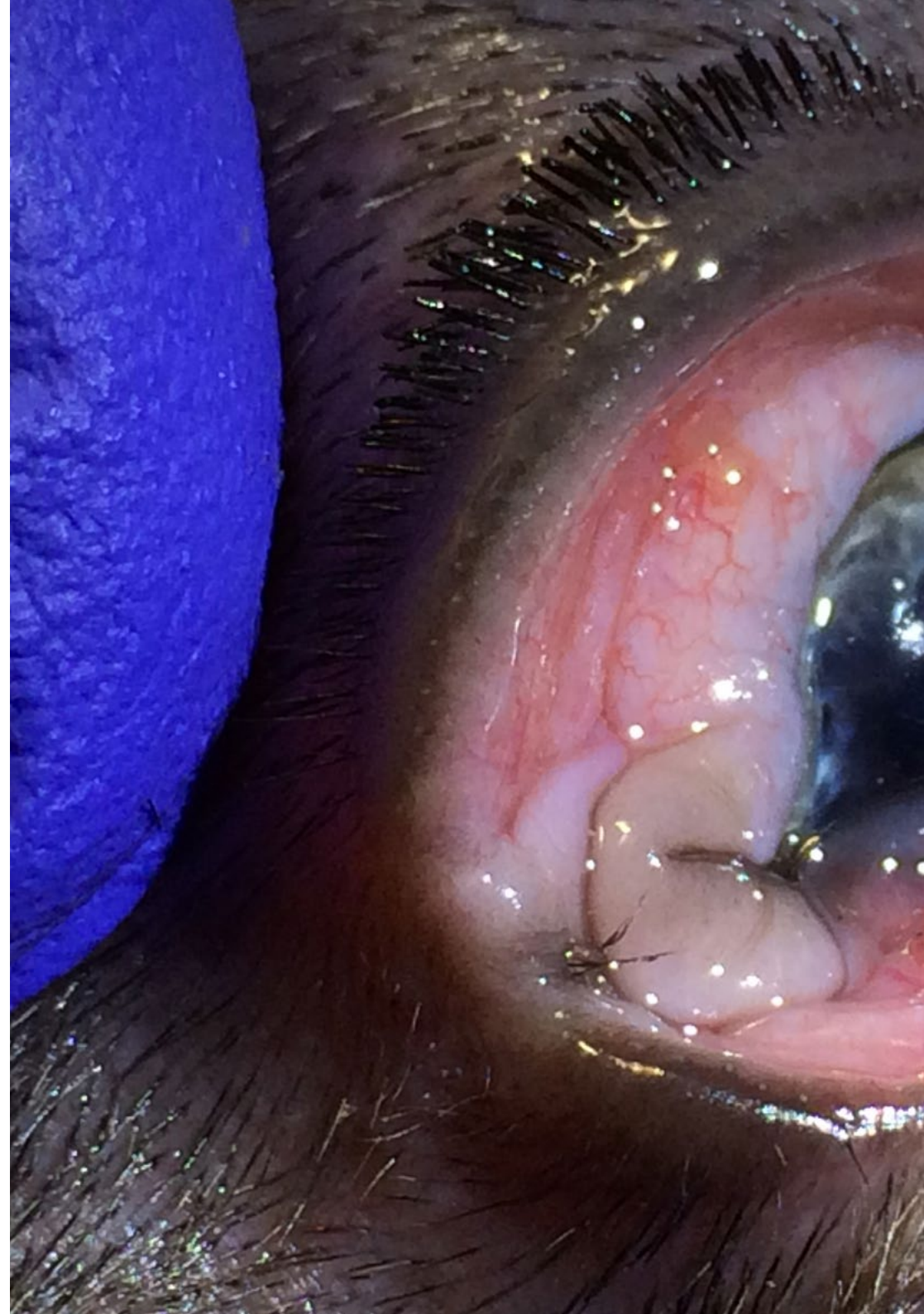


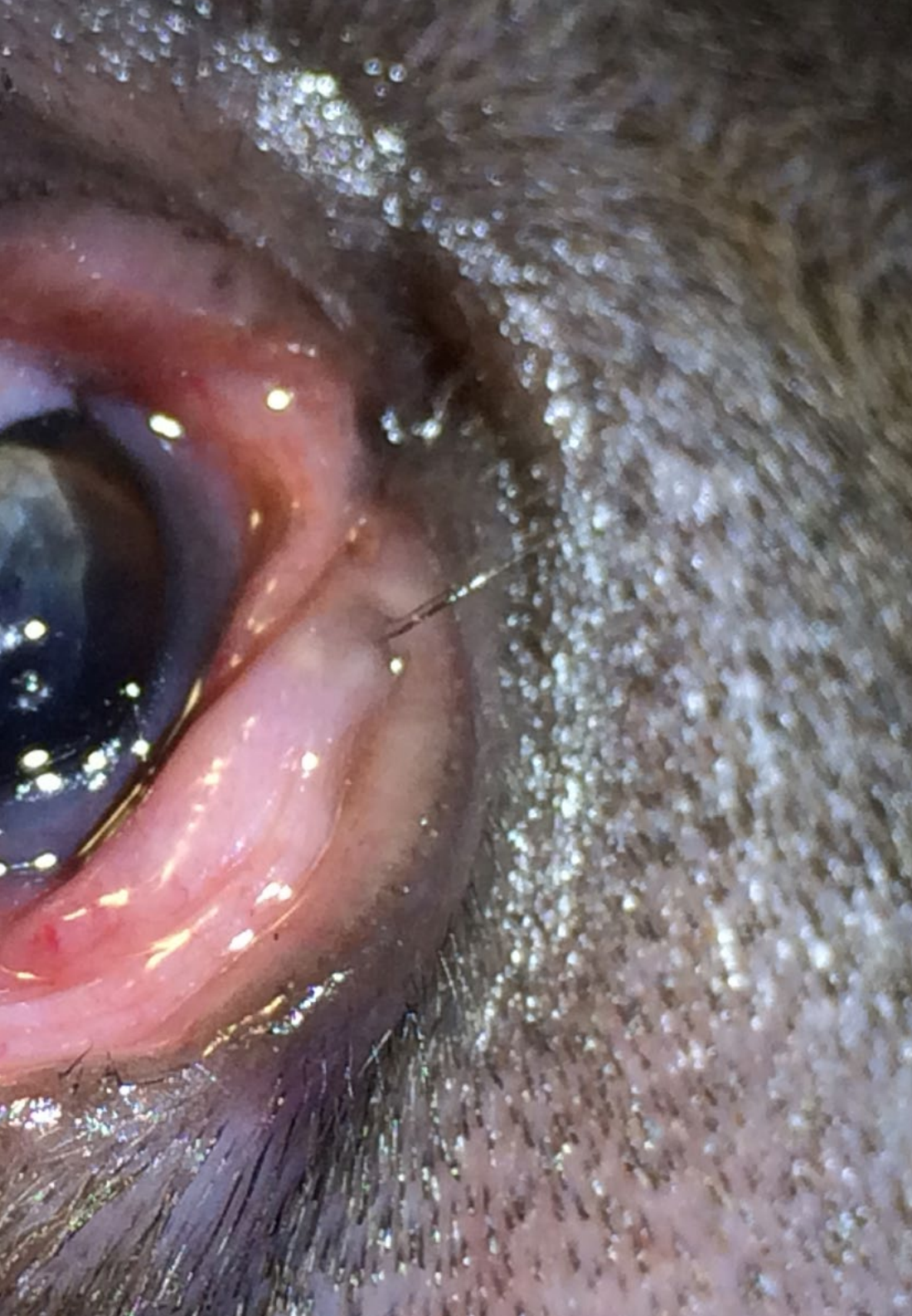
- 3.3. Congenital Disorders
  - 3.3.1. Aphakia
  - 3.3.2. Coloboma
  - 3.3.3. Microphakia
  - 3.3.4. Lenticonus
  - 3.3.5. PHPV/TVL
  - 3.3.6. Cataracts
- 3.4. Acquired Disorders
  - 3.4.1. Cataracts, Classification
  - 3.4.2. Characterization, Location
  - 3.4.3. Age
    - 3.4.3.1. Congenital
    - 3.4.3.2. Hereditary
    - 3.4.3.3. *Aged Related*
  - 3.4.4. Primary vs. Secondary
- 3.5. Metabolic and Systemic Cataracts
  - 3.5.1. Ions
  - 3.5.2. Diabetes
  - 3.5.3. Galactosemia
  - 3.5.4. Infectious Diseases
- 3.6. Metabolic and Systemic Cataract Treatment
  - 3.6.1. Medical
  - 3.6.2. Surgical
- 3.7. Eye Disorders and Untreated Cataract Sequelae
  - 3.7.1. Eye Disorders
  - 3.7.2. Untreated Cataract Sequelae
    - 3.7.2.1. Iris Hyperpigmentation
    - 3.7.2.2. Other Sequelae
- 3.8. Dislocation
  - 3.8.1. Primary Dislocation
  - 3.8.2. Secondary Dislocation
- 3.9. Cataract Surgery
  - 3.9.1. Patient Selection
  - 3.9.2. Complementary Tests
    - 3.9.2.1. Ultrasound
    - 3.9.2.2. Gonioscopy
    - 3.9.2.3. ERG
  - 3.9.3. Complications
    - 3.9.3.1. Preoperative
    - 3.9.3.2. Intraoperative
    - 3.9.3.3. Postoperative
  - 3.9.4. Patient Preparation
  - 3.9.5. Equipment
  - 3.9.6. Surgery
- 3.10. Lens Luxation Surgery
  - 3.10.1. Patient Choice
  - 3.10.2. Patient Preparation
  - 3.10.3. Intraoperative Complications
  - 3.10.4. Techniques

## Module 4. Uveal and Retinal Diseases and Surgery

- 4.1. Embryology and Anatomy of Uveal
  - 4.1.1. Embryology
  - 4.1.2. Anatomy
- 4.2. Congenital Disorders
  - 4.2.1. Heterochromia
  - 4.2.2. Coloboma
  - 4.2.3. Persistent Pupillary Membranes
  - 4.2.4. Dyscoria
- 4.3. Degenerative Disorders
  - 4.3.1. Iris Atrophy
  - 4.3.2. Iris Cysts

- 4.4. Uveal Inflammation
  - 4.4.1. Intraocular Causes
  - 4.4.2. Systemic Causes
- 4.5. Diagnosis and Clinical Introduction
  - 4.5.1. Ophthalmological Examination
  - 4.5.2. Neuro-Ophthalmology
- 4.6. Discoloration
  - 4.6.1. Benign
  - 4.6.2. Neoplasms
    - 4.6.2.1. Primary
    - 4.6.2.2. Metastatic
- 4.7. Specific Treatments Based on Cause
  - 4.7.1. Topical Treatments
  - 4.7.2. Adjuvant systemic therapy
  - 4.7.3. Specific Therapy by Etiology
  - 4.7.4. Sequelae Control
- 4.8. Variations in Ocular Fundus Normality
  - 4.8.1. Age
  - 4.8.2. Albinism
- 4.9. Retinal Disorders
  - 4.9.1. On Development
  - 4.9.2. Hereditary
  - 4.9.3. Storage Related
  - 4.9.4. Inflammatory (Causes)
  - 4.9.5. Various
    - 4.9.5.1. SARDs
    - 4.9.5.2. CAR
    - 4.9.5.3. Immune-Mediated Retinitis
    - 4.9.5.4. Uveodermatologic Syndrome
    - 4.9.5.5. Nutritional
    - 4.9.5.6. Neoplasms





4.10. Medical Management vs. Surgical Retinal Lesions

4.10.1 Types of Retinal Detachment

4.10.2 Genetic Disorders

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*A complete and efficient program that will be tailored to your needs and expectations”*

# 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.

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

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

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



## Relearning Methodology

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

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



*Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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

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

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



#### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

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



#### Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### Interactive Summaries

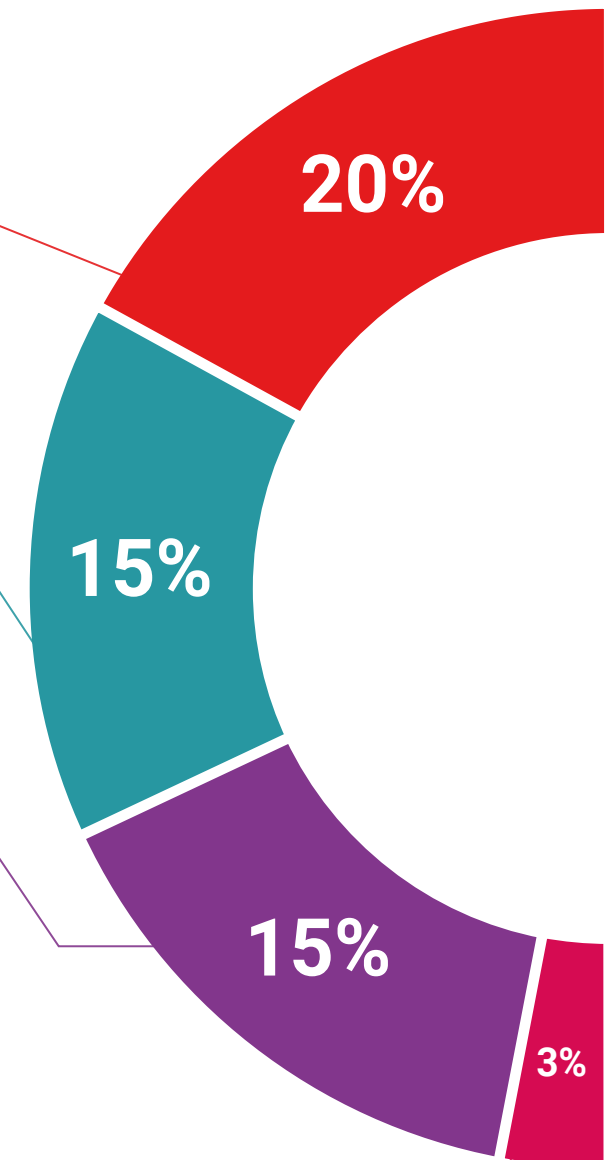
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

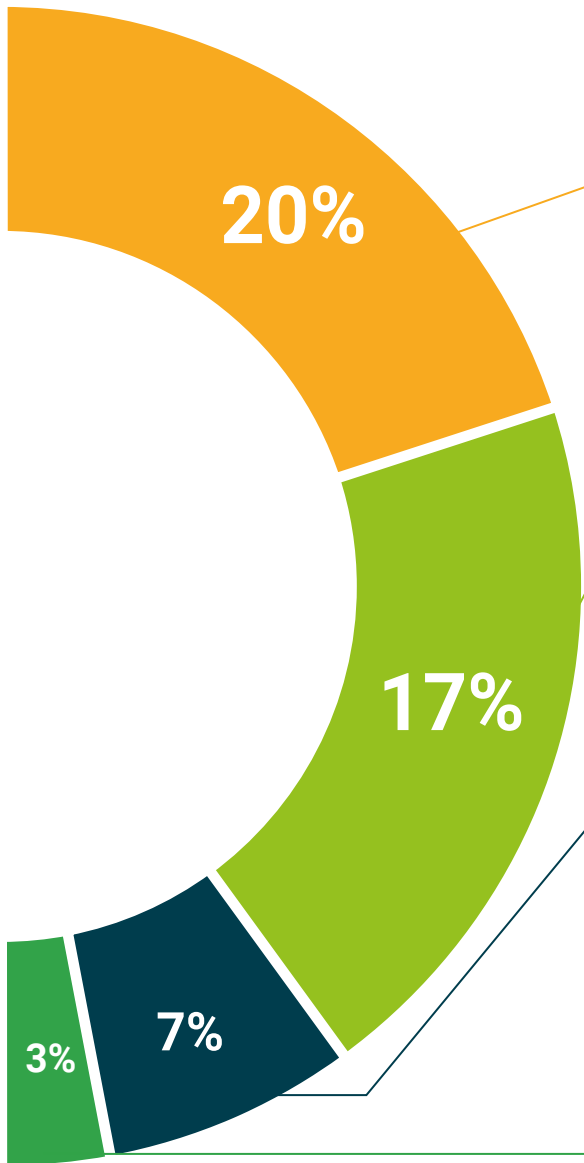
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06

# Certificate

The Postgraduate Diploma in Corneal, Crystalline Lens, Uveal and Retinal Surgery in Small Animals guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.





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

This private qualification will allow you to obtain a **Postgraduate Diploma in Corneal, Crystalline Lens, Uveal and Retinal Surgery 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** private qualification 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 Diploma in Corneal, Crystalline Lens, Uveal and Retinal Surgery in Small Animals**

Modality: **online**

Duration: **6 months**

Accreditation: **24 ECTS**



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



## Postgraduate Diploma Corneal, Crystalline Lens, Uveal and Retinal Surgery in Small Animals

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Diploma

Corneal, Crystalline Lens, Uveal and  
Retinal Surgery in Small Animals