

Postgraduate Diploma

Diagnostic Techniques Applied to Ocular Oncology



Postgraduate Diploma Diagnostic Techniques Applied to Ocular Oncology

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

Website: www.techitute.com/pk/medicine/postgraduate-diploma/postgraduate-diploma-diagnostic-techniques-applied-ocular-cncology

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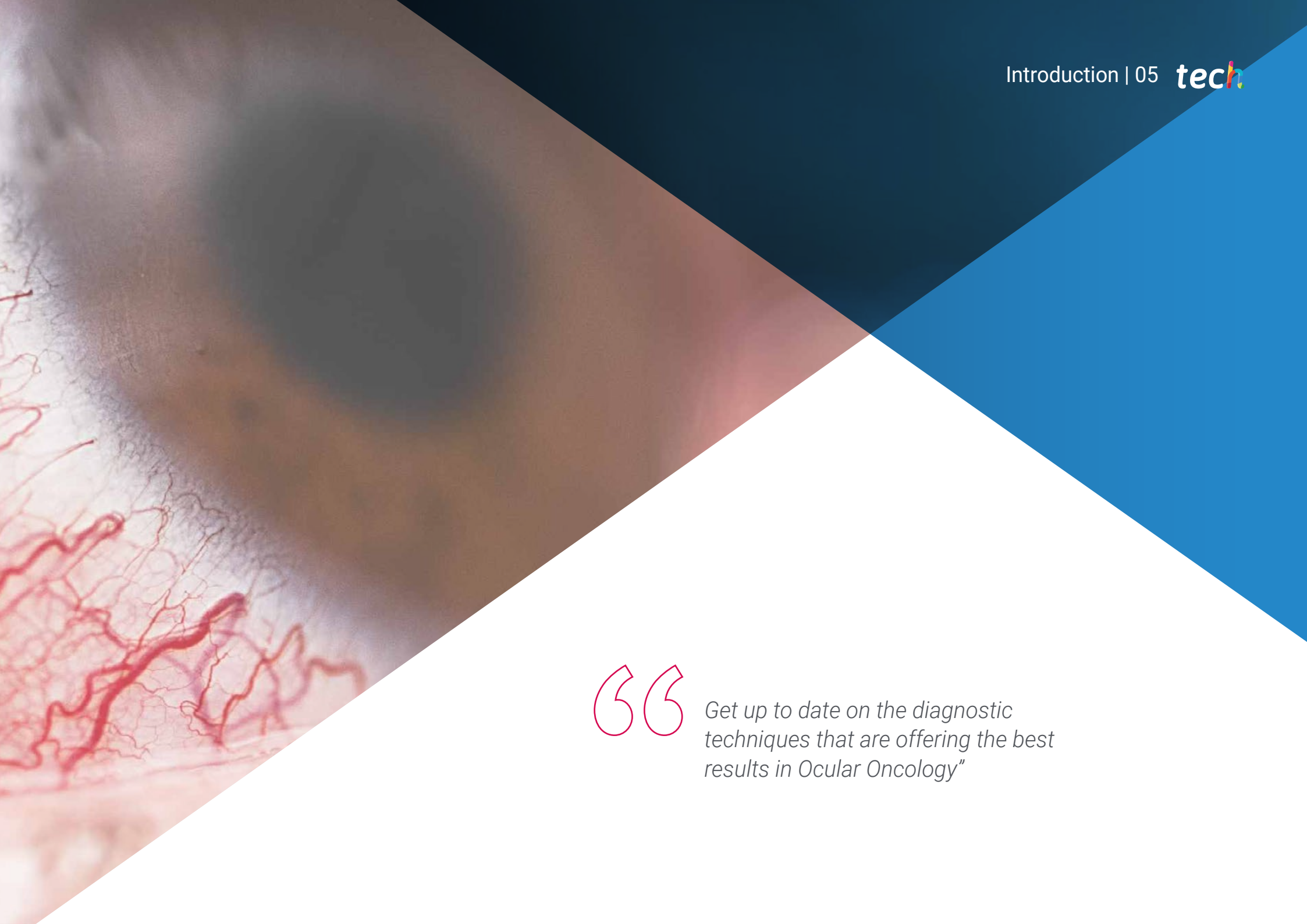
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01

Introduction

Intraocular and orbital tumors are relatively rare, but their early detection and proper treatment can be crucial for the preservation of the patient's vision and life. Therefore, it is important for ophthalmologists to be updated in the latest diagnostic techniques and in the mastery of the different types of tumors and their treatment, so this program is essential for that. It will cover everything from Radiology applied to Ocular Oncology to the diagnosis and treatment of different types of benign and malignant intraocular and orbital tumors. In addition, the program is taught 100% online for the convenience of the students.





“

Get up to date on the diagnostic techniques that are offering the best results in Ocular Oncology”

Oncological Ophthalmology has acquired great importance in recent years due to the increase in the incidence of intraocular tumors in adults. These tumors, although not very frequent, can have serious consequences on ocular health and the quality of life of patients. That is why it is essential to have highly trained professionals in this field to adequately address the diagnosis and treatment, thus ensuring a favorable prognosis and an optimal quality of life for affected patients.

For this reason, the TECH Postgraduate Diploma is positioned as a vital program to provide health professionals with a thorough preparation in advanced diagnostic techniques in the field of Ocular Oncology. The qualification is designed to provide a comprehensive overview of current diagnostic techniques used in the diagnosis of ocular tumors, including Radiology and malignant and benign intraocular tumors. Likewise, pathological anatomy applied to Ocular Oncology will be covered.

This program is taught in 100% online mode, which allows students to organize their time and academic resources in a flexible way and adapted to their needs. In addition, the *Relearning* pedagogical methodology, based on the directed reiteration of concepts, favor a significant and lasting learning.

This **Postgraduate Diploma in Diagnostic Techniques Applied to Ocular Oncology** 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 medical experts focused on Diagnostic Techniques Applied to Ocular Oncology
- ♦ 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



Establish the fundamentals of normal anatomy and histology of the eye in an expert manner"

“

Enroll in a unique qualification in the academic market for diagnostic techniques in Ocular Oncology”

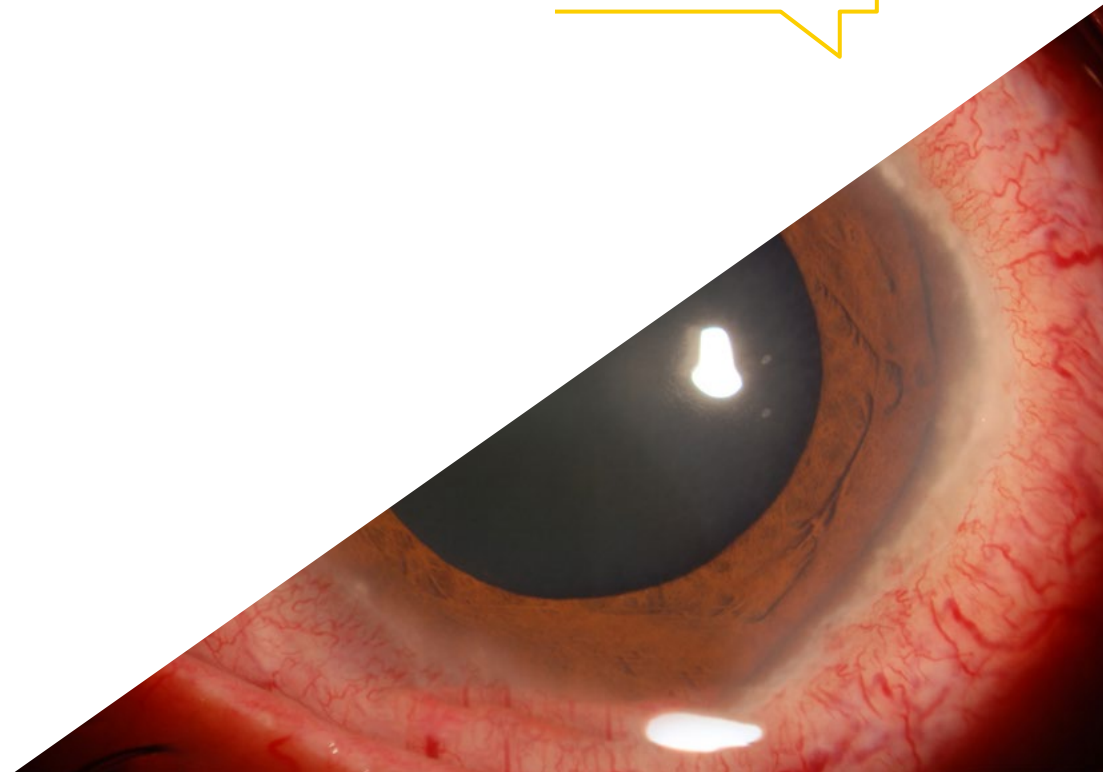
The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

You will have the most updated view of the different imaging tests for intraocular and orbital tumor pathology.

You will be able to handle with solvency all the technical considerations of the different imaging tests in this area.



02 Objectives

During a period of 6 months, the expert in Ophthalmology will have the opportunity to receive a complete and updated preparation on the different diagnostic techniques in Ocular Oncology thanks to a highly effective combination of theory and practice. In addition, the Postgraduate Diploma offers innovative didactic resources, such as detailed videos and clinical cases, which will allow students to obtain a closer and more realistic view of the latest advances in the field.



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*Enhance all your career prospects
in Ophthalmology with a unique and
decisive academic experience”*

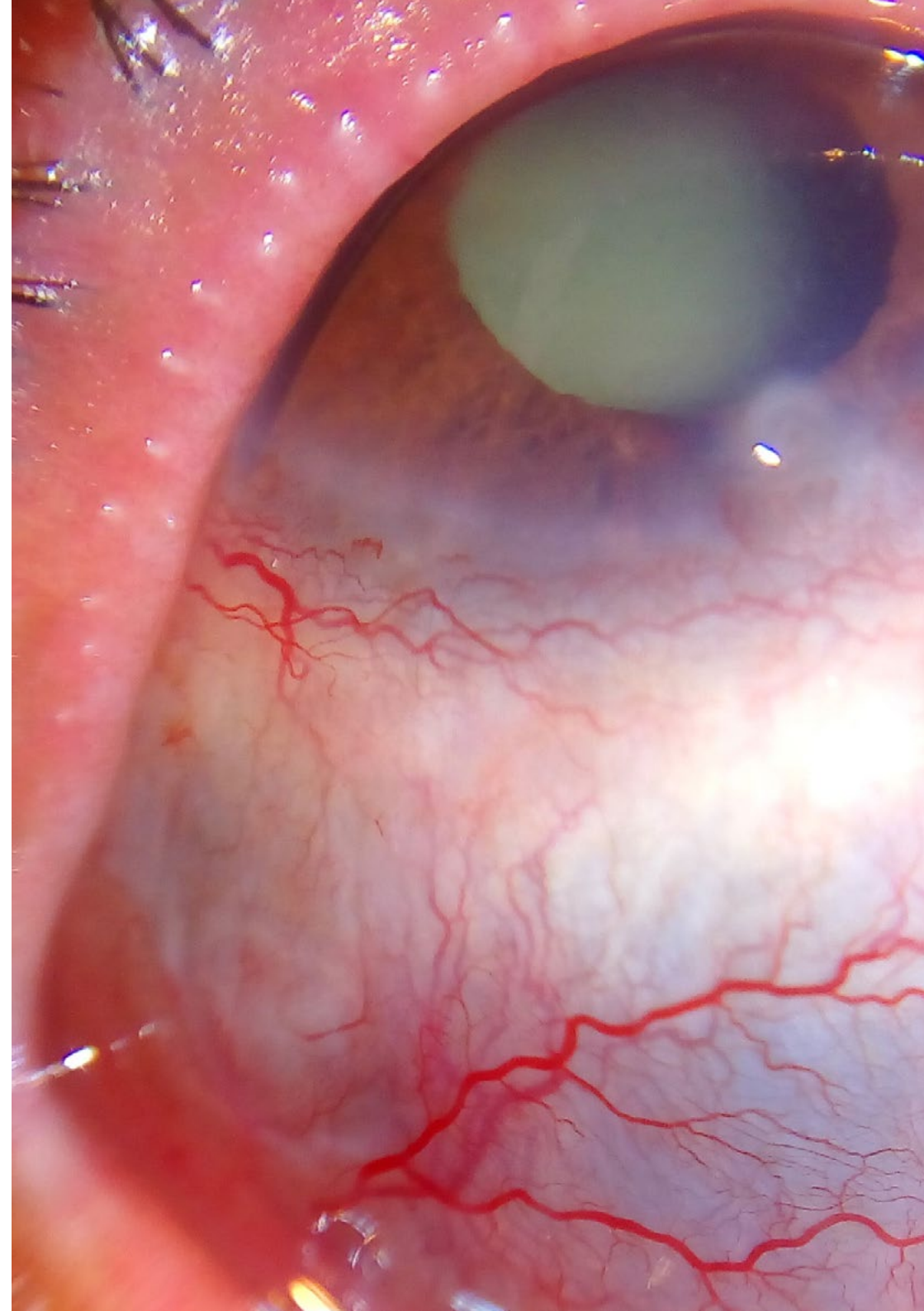


General Objectives

- Update knowledge on the different tumors that can affect the eye and its appendages
- Deepen in the diagnostic-therapeutic approach of ocular neoplasms
- Delve into the main common characteristics of ocular neoplasms
- Deepen in the different tumor lesions that can affect the eyelids, the lacrimal drainage pathway and the orbit
- Investigate the different types of tumors that can be located on the ocular surface, cornea and conjunctiva
- Delve into the most recent research in Oncological Ophthalmology

“

*Achieves objectives and
identifies molecular alterations
in Uveal Melanoma”*





Specific Objectives

Module 1. Ocular Oncology

- ♦ Update knowledge on tumor pathology affecting the eyeball and its appendages
- ♦ Deepen the knowledge of diagnostic techniques and the different therapeutic possibilities available

Module 2. Radiology Applied to Ocular Oncology

- ♦ Provide the most updated knowledge about the different imaging tests for intraocular and orbital tumor pathology
- ♦ Detail the indications and technical considerations of the different imaging tests in Ocular Oncology

Module 3. Pathological Anatomy Applied to Ocular Oncology

- ♦ Deepen in the normal anatomy and histology of the eye
- ♦ Delve into the knowledge of the tumor pathology of the eyeball and related structures, reviewing the histopathological characteristics of the most frequent tumors
- ♦ Identify the main molecular alterations with clinical relevance present in Uveal Melanoma and Retinoblastoma

03

Course Management

The teaching team of the Postgraduate Diploma is composed of a group of highly experienced professionals in the field of Ocular Oncology. This team is made up of medical specialists who have extensive experience in reference hospital institutions and who have a solid academic background. In addition, they have great teaching skills and are committed to prepare highly qualified professionals in the latest diagnostic techniques in this field.





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*Succeed with prestigious
ophthalmologists and take your
medical practice to the next level”*

Management



Dr. Garrido Hermosilla, Antonio Manuel

- Medical Specialist in Ophthalmology
- Specialist in the Ophthalmology Service of the Virgen Macarena University Hospital
- Specialist in Oculoplasty-Orbit and Ocular Oncology Units
- Specialist in National Reference Units (CSUR) for Adult and Childhood Intraocular Tumors
- Co-coordinator of Andalusian Reference Units (UPRA) for the Integral Management of the Anophthalmic Cavity and for Graves' Orbitopathy
- Tutor for Ophthalmology Interns



Dr. Relimpio López, María Isabel

- Coordinator of the Adult Intraocular Tumors Unit at the CSUR of the Hospital Virgen Macarena
- Specialist Area Physician (FEA) in the Ophthalmology Service at the University Hospital Virgen Macarena (HUVVM)
- Specialist in the Retina and Ocular Oncology Units of the HUVVM
- Coordinator of the National Reference Unit (CSUR) for Adult Intraocular Tumors
- Specialist in the National Reference Unit (CSUR) for Childhood Intraocular Tumors
- Ophthalmologist in the European Network ERN-PaedCan for Retinoblastoma
- PhD in Medicine, University of Seville
- Clinical Tutor of Ophthalmology, Medical Degree, University of Seville

Professors

Dr. Domínguez Serrano, Francisco de Borja

- ♦ Medical Specialist in Ophthalmology
- ♦ Specialist Area Practitioner (FEA) in the Ophthalmology Service, Virgen Macarena University Hospital (HUVU)
- ♦ Ophthalmologist in the Retina and Ocular Oncology Units of the HUVU
- ♦ Ophthalmologist at the National Reference Unit (CSUR) for Adult Intraocular Tumors
- ♦ Clinical Tutor of Ophthalmology of the Medicine Degree at the University of Seville

Dr. Soto Sierra, Marina

- ♦ Ophthalmologist of the Andalusian Ophthalmologic Institute
- ♦ Medical Specialist in Ophthalmology
- ♦ Specialist in the Ophthalmology Service of the Virgen Macarena University Hospital in the Uveitis and Ophthalmopediatrics-Strabismus Units
- ♦ Ophthalmology Clinical Tutor

Dr. Parrilla Vallejo, María

- ♦ Ophthalmologist subspecialized in Glaucoma at the Virgen Macarena University Hospital
- ♦ Medical Specialist in Ophthalmology
- ♦ Area Specialist in the Ophthalmology Service of the Virgen Macarena University Hospital (HUVU), in the Glaucoma and Ocular Oncology Units, and in the National Reference Unit for Adult Intraocular Tumors
- ♦ PhD in Medicine, University of Seville
- ♦ Tutor of Ophthalmology Resident Interns (MIR)
- ♦ Clinical tutor of Ophthalmology in the Degree of Medicine at the University of Seville

Dr. Gómez Escobar, Antonio José

- ♦ Medical Specialist in Geriatrics and Ophthalmology
- ♦ Specialist in the Ophthalmology service of the Virgen Macarena University Hospital, for the Macula and Ocular Oncology units, and the National Reference Unit (CSUR) for Adult Intraocular Tumors
- ♦ Ophthalmology Resident Medical Interns (MIR) Tutor
- ♦ Ophthalmology Clinical Tutor

Dr. Caparrós Escudero, Carlos

- ♦ Medical Specialist in Radiodiagnosis
- ♦ Specialist Area Physician (FEA) in the Radiodiagnostic Service of the Virgen Macarena University Hospital (HUVU) in the National Reference Units (CSUR) for Adult and Childhood Intraocular Tumors
- ♦ Member of the European Network ERN-PaedCan for Retinoblastoma
- ♦ Radiology Clinical Tutor

Dr. Rosales Martínez, Eduardo

- ♦ Medical Specialist in Radiodiagnosis of the Virgen Macarena University Hospital
- ♦ Medical Specialist in Radiodiagnosis
- ♦ Specialist of the Radiodiagnostic Service at the Virgen Macarena University Hospital (HUVU), where he is also a Tutor of Internal Medical Residents (MIR) of Radiodiagnostics
- ♦ Radiology Clinical Tutor

Dr. Busquier Cerdán, Teresa

- ♦ Medical Specialist in Radiodiagnosis of the Virgen Macarena University Hospital
- ♦ Specialist in the Radiodiagnosis Service of the Virgen Macarena University Hospital (HUVH)
- ♦ Radiology Clinical Tutor

Dr. Roquette Mateos, Mario

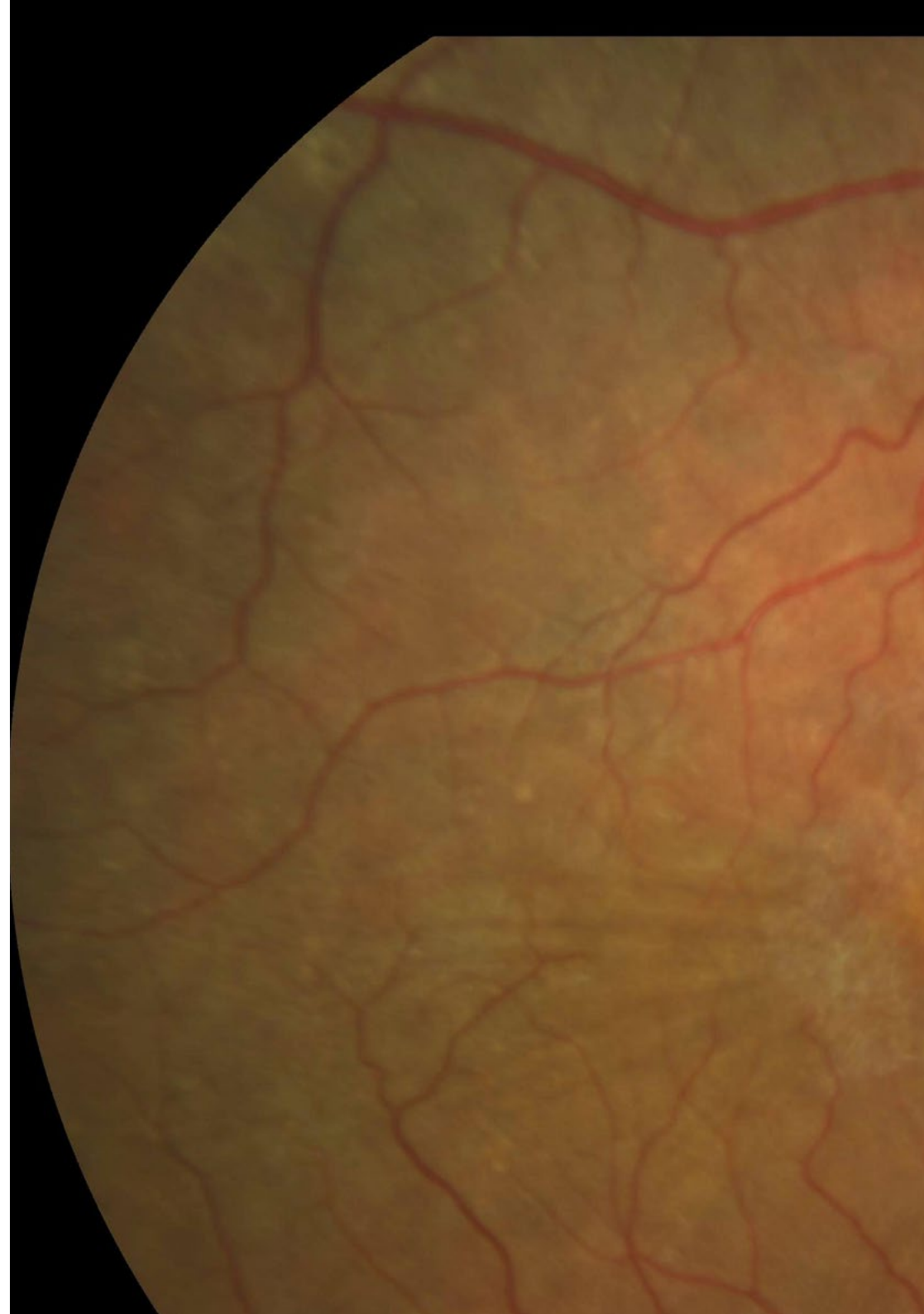
- ♦ Medical Specialist in Radiodiagnosis of the Virgen Macarena University Hospital
- ♦ Degree in Medicine from the University of Seville
- ♦ Member of: Spanish Society of Medical Radiology, Spanish Society of Emergencies Radiology

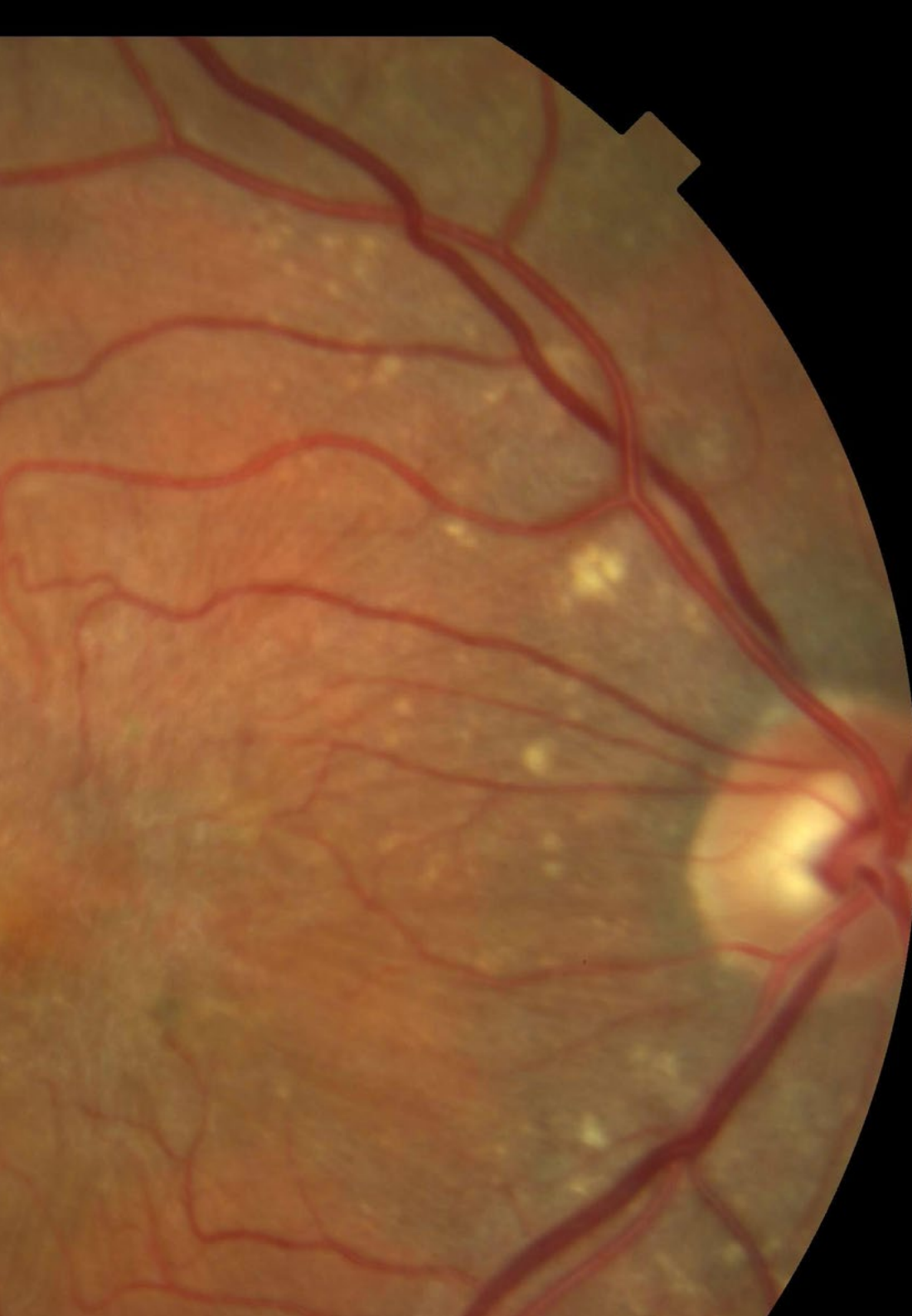
Dr. Pérez Pérez, Manuel

- ♦ Doctor Specialist in the Ophthalmology Service at Ophthalmology at Virgen Macarena University Hospital
- ♦ Collaborator of the Medical Oncology Service of the Virgen Macarena University Hospital
- ♦ Member of the Spanish Society of Pathological Anatomy

Dr. Gutiérrez Domingo, Álvaro

- ♦ Medical Specialist in Anatomic Pathology
- ♦ Specialist Area Physician (FEA) in the Ophthalmology Service at the University Hospital Virgen Macarena (HUVH)
- ♦ Member of the Spanish Pathological Anatomy Society





Dr. Mayorga Pineda, María

- ♦ Medical Specialist in Radiodiagnosis of the Virgen Macarena University Hospital
- ♦ Medical Specialist in Radiodiagnosis
- ♦ Area Physician in the Radiodiagnostic Service of the Virgen Macarena University Hospital
- ♦ Members of the Spanish Society of Medical Radiology

Dr. Ríos Martín, Juan José

- ♦ Director of the Clinical Management Unit at the Virgen Macarena University Hospital
- ♦ Chief of Section of the Anatomic Pathology Department of the Virgen Macarena University Hospital
- ♦ Area Specialist of the Anatomical Pathology Department of the HUVM
- ♦ PhD in Medicine, University of Seville
- ♦ Member of the European Network ERN-PaedCan for Retinoblastoma

Dr. Torres Gómez, Francisco Javier

- ♦ Doctor Specialist in Ophthalmology at Virgen Macarena University Hospital
- ♦ Area Specialist in the Anatomical Pathology Service of the Hospital
- ♦ Surgical Pathologist at the High Resolution Hospital of Utrera
- ♦ PhD in Medicine, University of Seville
- ♦ Master's Degree in Clinical Management. CEU Cardenal Herrera
- ♦ Postgraduate Diploma in Dermatopathology
- ♦ Member of the Board of Directors of Spanish Society of Cytology

04

Structure and Content

The syllabus of the Postgraduate Diploma has been carefully designed to provide students with a complete update on diagnostic techniques in Ocular Oncology in a period of time of only 6 months. The contents have been designed by leading specialists in this field, who have carefully selected the didactic material to ensure the quality of the teaching. Through the syllabus, the students will acquire advanced knowledge on the latest diagnostic techniques to treat the most common ocular tumors in adult patients, which will allow a rigorous update in this constantly evolving field.



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*Addresses concepts such as
Tumorigenesis thanks to a very
complete syllabus”*

Module 1. Ocular Oncology

- 1.1. Epidemiological Aspects of Ocular Tumors
 - 1.1.1. Definition of Neoplasms
 - 1.1.2. Risk Factors
 - 1.1.3. Epidemiology
- 1.2. Classification of Ocular Neoplasms
 - 1.2.1. According to Main Location
 - 1.2.2. According to Histological Subtype
 - 1.2.3. According to Age
- 1.3. Tumorigenesis
 - 1.3.1. Etiology of Cancer
 - 1.3.2. Immunology
 - 1.3.3. Genetics
- 1.4. Complementary Tests I
 - 1.4.1. Anterior Pole Imaging
 - 1.4.2. Retinography
 - 1.4.3. Wide Field Imaging
- 1.5. Complementary Tests II
 - 1.5.1. Fluorescein Angiography
 - 1.5.2. Indocyanine Green Angiography
 - 1.5.3. Autofluorescence
- 1.6. Complementary Tests III: Optical Coherence Tomography (OCT)
 - 1.6.1. Anterior Pole OCT
 - 1.6.2. Posterior Pole OCT
 - 1.6.3. Angio-OCT
- 1.7. Complementary Tests IV: Ultrasound
 - 1.7.1. Ultrasonic Biomicroscopy (BMU)
 - 1.7.2. Ocular Ultrasonography
 - 1.7.3. Doppler Ultrasound
- 1.8. Complementary Tests V: Orbit and Extension Study
 - 1.8.1. Computerized Axial Tomography (CAT)
 - 1.8.2. Positron Emission Tomography (PET) - CT Scan
 - 1.8.3. Magnetic Resonance Imaging (MRI)

- 1.9. Biopsies in Ocular Oncology
 - 1.9.1. Criteria for Taking Biopsies
 - 1.9.2. Technique in Orbit and Ocular Surface Neoplasms
 - 1.9.3. Technique in Intraocular Neoplasms
- 1.10. Treatments Used in Ocular Oncology
 - 1.10.1. Chemotherapy
 - 1.10.2. Radiotherapy
 - 1.10.3. Surgical Treatments

Module 2. Radiology Applied to Ocular Oncology

- 2.1. Radiology in Ocular Oncology
 - 2.1.1. Technical Considerations
 - 2.1.2. Indications
 - 2.1.3. Protocols
- 2.2. Benign Intraocular Tumors
 - 2.2.1. Choroid-retinal Hemangiomas
 - 2.2.2. Retinal Melanocytoma
 - 2.2.3. Others
- 2.3. Malignant Intraocular Tumors I: Retinoblastoma
 - 2.3.1. Introduction
 - 2.3.2. Imaging Tests
 - 2.3.3. Radiological Differential Diagnosis: Coats disease, persistent hyperplastic primary vitreous, retinopathy of prematurity
- 2.4. Malignant Intraocular Tumors II: Uveal Melanoma
 - 2.4.1. Introduction
 - 2.4.2. Imaging Tests
 - 2.4.3. Clinical- Radiological Correlation
- 2.5. Malignant Intraocular Tumors III: Metastasis
 - 2.5.1. Introduction
 - 2.5.2. Imaging Tests
 - 2.5.3. Clinical- Radiological Correlation
- 2.6. Benign Orbital Tumors I
 - 2.6.1. Child Hemangioma
 - 2.6.2. Optic Tract Glioma
 - 2.6.3. Optic Nerve Sheath Meningioma

- 2.7. Benign Orbital Tumors II
 - 2.7.1. Pleomorphic Adenoma or Mixed Tumor of the Lacrimal Gland
 - 2.7.2. Dermoid Cysts
 - 2.7.3. Lipoma
- 2.8. Malign Orbital Tumors I
 - 2.8.1. Metastasis
 - 2.8.2. Lymphoproliferative Lesions
 - 2.8.3. Rhabdomyosarcoma
- 2.9. Malign Orbital Tumors II
 - 2.9.1. Lacrimal Gland Carcinomas
 - 2.9.2. Plasma Cell Tumors
 - 2.9.3. Others
- 2.10. Other Orbital Tumor Pathology for Differential Diagnosis
 - 2.10.1. Lymphatic Malformations: lymphangioma
 - 2.10.2. Arteriovenous Malformations
 - 2.10.3. Idiopathic Orbital Inflammatory Disease or Inflammatory Pseudotumor of the Orbit

Module 3. Pathological Anatomy Applied to Ocular Oncology

- 3.1. Anatomy and Histology of the Eye
 - 3.1.1. Eye Anatomy
 - 3.1.2. Histology of the Eye
- 3.2. Tumors of the Ocular Orbit
 - 3.2.1. Pediatric Tumors of the Orbit
 - 3.2.2. Benign Tumors of the Orbit
 - 3.2.3. Malignant Tumors of the Orbit
- 3.3. Conjunctival and Corneal Tumors
 - 3.3.1. Epithelial Tumors
 - 3.3.2. Melanocytic Tumors
 - 3.3.3. Other tumours
- 3.4. Tumors of the Uvea (non-melanoma)
 - 3.4.1. Benign Melanocytes tumors
 - 3.4.2. Epithelial Tumors
 - 3.4.3. Other tumours

- 3.5. Uveal Melanoma
 - 3.5.1. Epidemiology
 - 3.5.2. Histopathology
 - 3.5.3. Molecular Aspects
- 3.6. Neurosensory Retinal Tumors
 - 3.6.1. Retinoblastoma
 - 3.6.2. Astrocytoma
 - 3.6.3. Vitreoretinal Lymphoma
- 3.7. Retinal Epithelial Tumors
 - 3.7.1. Benign Tumors
 - 3.7.2. Malignant tumours
- 3.8. Optic Disc and Optic Nerve Tumors
 - 3.8.1. Primary Tumors
 - 3.8.2. Secondary Tumors
- 3.9. Lacrimal Gland Tumors
 - 3.9.1. Epithelial Tumors
 - 3.9.2. Hematolymphoid Tumors
 - 3.9.3. Secondary Tumors
- 3.10. Tear Drainage System Tumors
 - 3.10.1. Epithelial Tumors
 - 3.10.2. Other tumours



Tour the main tumors of the Tear Drainage system and make a difference as an ophthalmologist”

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.



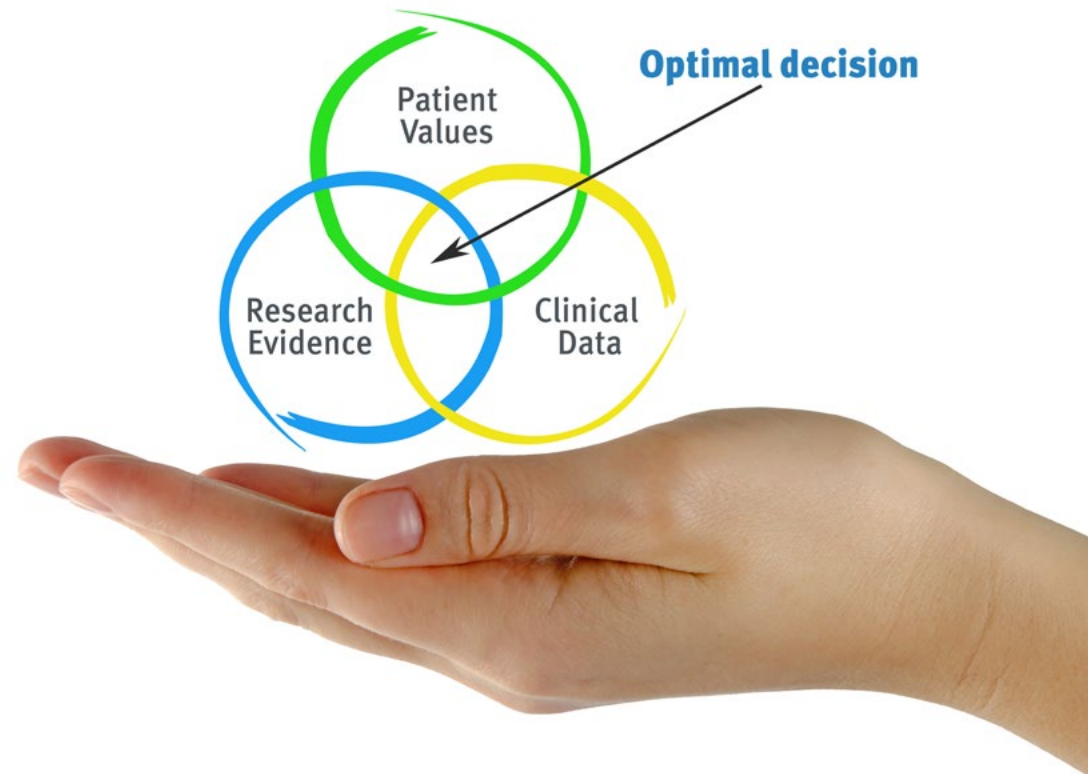
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately 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, trying to recreate the real conditions in the physician'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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the 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.

Professionals 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 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

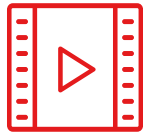
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical 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

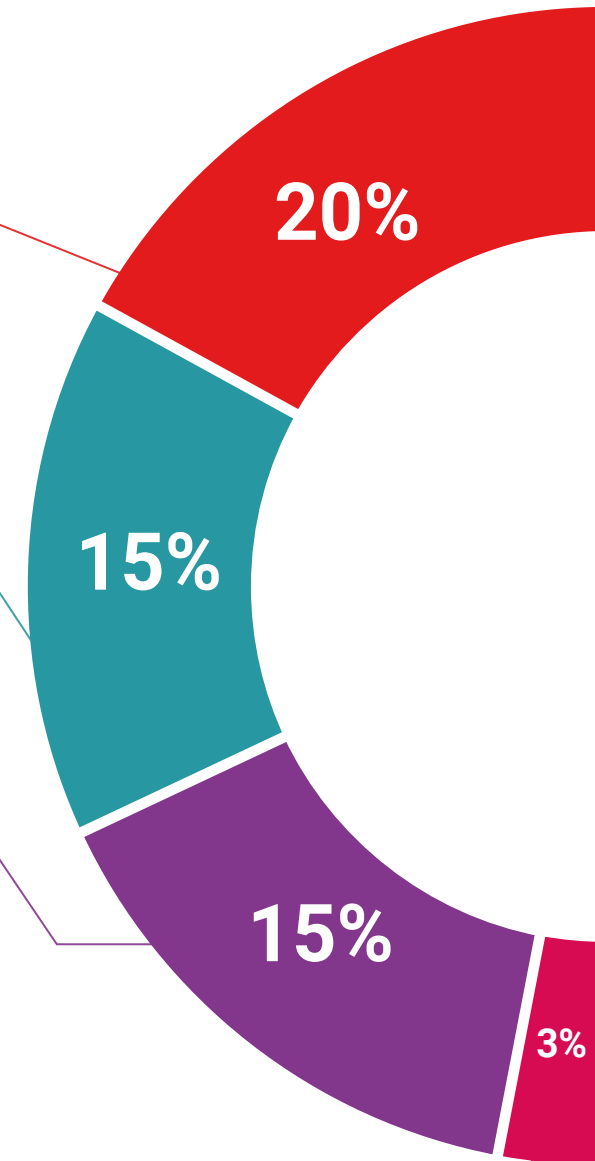
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

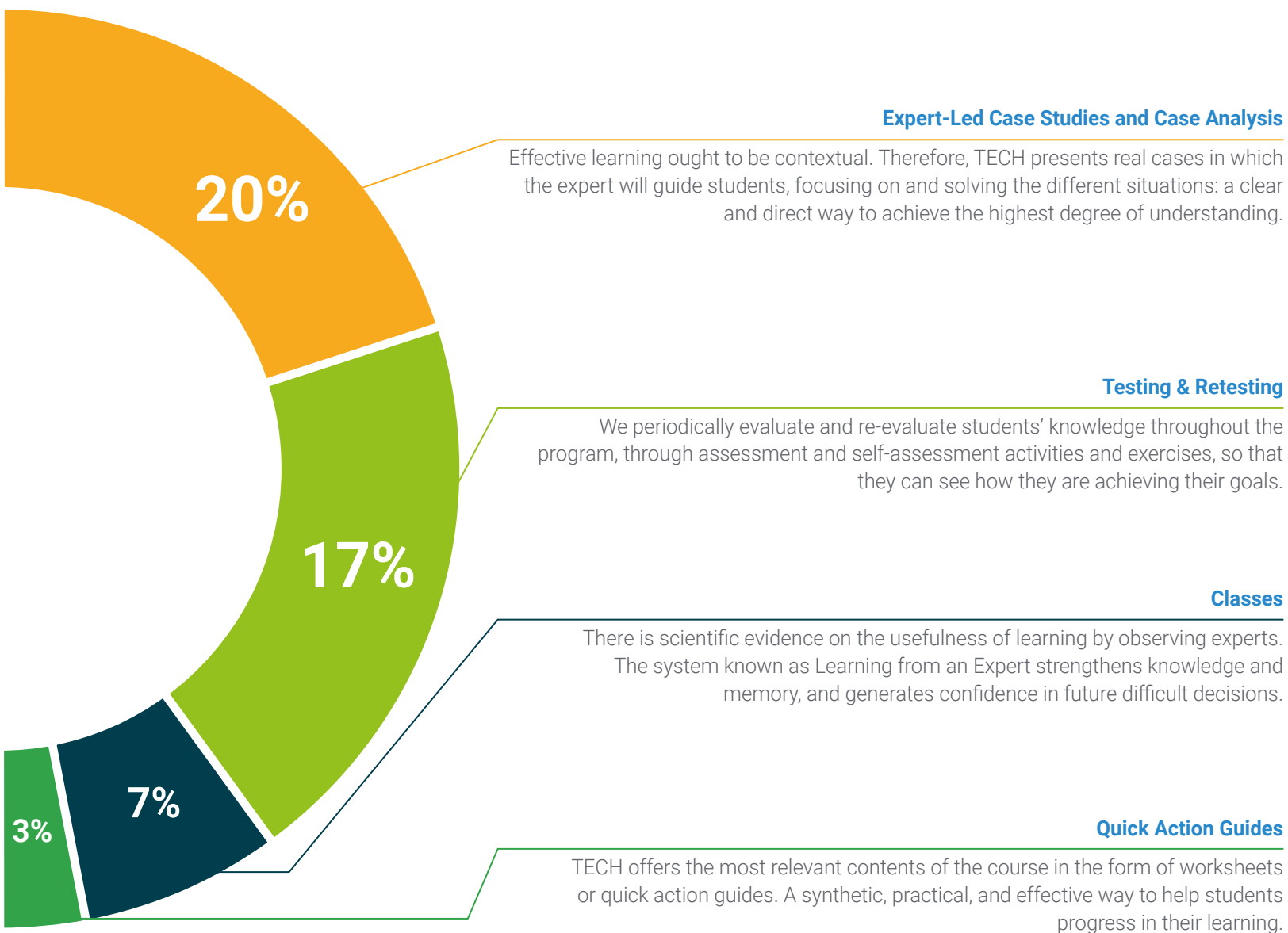
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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.





06 Certificate

The Postgraduate Diploma in Diagnostic Techniques Applied to Ocular Oncology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate 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"*

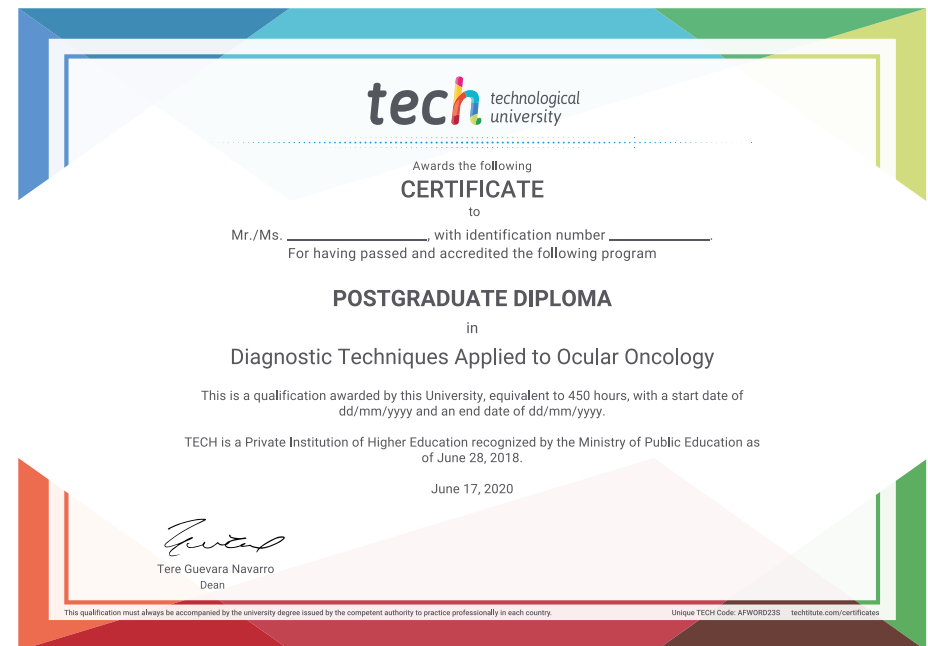
This **Postgraduate Diploma in Diagnostic Techniques Applied to Ocular Oncology** contains the most complete and up-to-date scientific program on the market.

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

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

Title: **Postgraduate Diploma in Diagnostic Techniques Applied to Ocular Oncology**

Official N° of hours: **450 h.**



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



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Postgraduate Diploma

Diagnostic Techniques Applied to Ocular Oncology

