



### Postgraduate Certificate

Glaucoma and Pediatric Ocular Pathology

» Modality: Online

» Duration: 12 weeks

» Certificate: TECH Global University

» Accreditation: 12 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/glaucoma-pediatric-ocular-pathology

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### tech 06 | Introduction

Children can also suffer from the ocular pathologies and refractive defects typical in adults, as well as others that are more typical in childhood, such as strabismus and amblyopia. In all cases, early diagnosis and treatment, before the eye completes its development, is decisive, so that ocular defects can be corrected and do not leave lifelong consequences.

Strabismus is the most frequent motive for ocular surgery in children and amblyopia is the most frequent cause of early monocular vision loss. After the above pathologies, eye trauma is the next most significant cause of ocular morbidity in children.

According to INE data, there are about 250 new cases of infant glaucoma in Spain every year. Although it is not a very high incidence, its significant consequences for vision from the first months of life mean that immediate diagnosis and surgical treatment are essential.

Adequate updating of specialists in pediatric ocular pathology will allow them to strengthen their knowledge and provide quality medical care to children and their families.

Update your knowledge through the scientific program of the Postgraduate Certificate in Glaucoma and Pediatric Ocular Pathology".

The **Postgraduate Certificate in Glaucoma and Pediatric Ocular Pathology** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- Development of clinical cases presented by experts in pediatric ocular pathology. The graphic, schematic, and practical contents with which they are created contain clinical information that is indispensable for professional practice
- New diagnostic and therapeutic developments in the treatment of the main pathologies of the eye
- It contains practical exercises where the self-assessment process can be carried out to improve learning
- An interactive learning system based on algorithms for decision making in clinical situations involving pediatric patients with eye disorders
- All of this will be complemented by 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.

### Introduction | 07 tech



This Postgraduate Certificate is the best investment you can make in selecting a refresher program for two reasons: in addition to updating your knowledge in glaucoma and pediatric ocular pathology, you will obtain a Postgraduate Certificate from TECH Global University."

The program's teaching staff includes professionals from the field who contribute their work experience to this educational 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 learn in real situations.

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

Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.

Incorporate the latest developments in glaucoma and pediatric ocular pathology into your daily practice and improve your patients' prognosis.



# 02 **Objectives**

The main objective of this scientific program is to update specialists' knowledge of the latest advances in glaucoma and pediatric ocular pathology so that they can carry out medical care with supporting scientific evidence and improve the quality of their medical practice.



### tech 10 | Objectives



### **General Objective**

 Keep up to date with diagnostic and therapeutic procedures in Ophthalmology, incorporating the latest advances into your daily medical practice in order to increase the quality and safety of care and improve patient prognosis.



A path to achieve education and professional growth that will propel you towards a greater level of competitiveness in the employment market".





### Objectives | 11 tech



### **Specific Objectives**

- Incorporate new developments in the management of patients with glaucoma into routine medical practice
- Review the pathophysiology of glaucoma and identify new diagnostic and therapeutic procedures in patients
- Follow current due diligence procedures to improve the development of medical protocols
- Expand knowledge in ophthalmopediatrics.
- Identify the age range of a person before proceeding with a medical examination
- Get to know the main pathologies of children under 3 years of age
- Gain knowledge about the most frequent pathologies in children who go to school
- Make correct diagnoses to know if it is necessary to use glasses



### tech 14 | Course Management

### Management



### Dr. Navea Tejerina, Amparo

- Medical Director of the Institute of Retina and Ocular Diseases
- FISABIO-Ophthalmology Medical Director (FOM)
- Head of the Retina Unit at FOM
- Specialist in Ophthalmology
- PhD in Medicine, University of Cadiz
- Spanish Society of Ophthalmology (SEO)
- Member of American Academy of Ophthalmology (AAO)
- Member of Association for Research in Vision and Opththalmology (ARVO)
- Member of Sircova
- Member of Oftared

#### **Professors**

#### Dr. Urcola Carrera, Aritz

- Glaucoma Unit Specialist at Miranza Ókular Clinic.
- Head of the Clinical Management Unit at the Araba University Hospital Head of the Glaucoma Unit. Araba University Hospital
- Ophthalmology Area Specialist at the Araba University Hospital.
- Head of Glaucoma Unit in Miranza Begitek
- Ophthalmology Specialist at Mendaro Hospital.
- Official Doctorate Program in Neuroscience University of the Basque Country
- \* Doctor of Medicine. Outstanding Cum Laude University of the Basque Country
- \* Master's Degree in Big Data Business Intelligence, Deusto University.
- Master's Degree in Ophthalmology Services Management from the University of Valladolid
- Degree in Medicine, University of Navarra

### Dr. Alcocer Yuste, Pablo

- Ophthalmologist at Vitthas Group
- Specialist in the field of Glaucoma and Cataract Surgery at the Fis FISABIO Medical Ophthalmology Foundation (F.O.M.) in Valencia
- Training stay at Moorfields Eye Hospital in London
- Researcher specialized in Glaucoma and Cataract Surgery

### Dr. Corsino Fernández Vila, Pedro

- Ophthalmologist specialized in Glaucoma, Diode and Refractive Surgery.
- Head of the Ophthalmology Department of Pontevedra University Hospital.
- Professor of Ophthalmology at the Complutense University of Madrid.

• PhD from the Complutense University of Madrid.

#### Dr. Lanzagorta Aresti, Aitor

- Ophthalmologist at the University Research Institute Fisabio Medical Ophthalmology
- Physician in the Glaucoma Unit Fisabio Ophthalmology
- NeuroOphthalmology Unit Fisabio Ophthalmology
- Degree in Medicine from the University of the Basque Country
- PhD, Medicine. University of Valencia
- Residency in Ophthalmology. La Fe University Hospital

#### Dr. Benítez del Castillo, Javier

- Head of the Ophthalmology Glaucoma Department of Hospital General S.A.S.
- Ophthalmologist at Lansys Costa Oeste Medical Center.
- Associate Professor of Ophthalmology at the University of Cadiz.
- Member of the European Society of Glaucoma

### Dr. Urcelay Segura, José Luis

- Head of the Glaucoma Department of the Ophthalmology Department of the Gregorio Marañón Hospital.
- PhD from the Complutense University of Madrid.
- \* Resident Medical Intern in Ophthalmology at the Gregorio Marañón General Hospital.
- Degree in Medicine and Surgery, University of the Basque Country
- \* Associate Professor of Ophthalmology at the Complutense University of Madrid.

### tech 16 | Course Management

#### Dr. Mengual Verdú, Encarnación

- Specialist in Ophthalmology in Alicante
- Member of the Spanish Society of Ophthalmology
- Degree in Medicine and Surgery from the University of Valencia
- \* Co-author of the book "Clinical Cases in Ophthalmology".

#### Dr. Hernández Pardines, Fernando

- Ophthalmologist at the San Juan Alicante Hospital
- Glaucoma Specialist at the San Juan Alicante Hospital
- Degree in Medicine and Surgery from the University of Miguel Hernández de Elche

### Dr. García Sánchez, Juan

- Medical Specialist in Ophthalmology
- Ophthalmologist at Doctor Hueso Clinic
- Physician at the Hospital San Juan de Alicante
- Research stay at the Klinikum Höchst in Frankfurt.
- Study stay at the European Bureau of Ophthalmology
- PhD in Medicine and Surgery from the University of Valencia

#### Dr. Aguirre Balsalobre, Fernando

- Ophthalmologist at Sant Joan University Hospital
- European Diploma FEBOS-CR
- Collaborating teacher at the Faculty of Medicine of the Miguel Hernández University of Elche
- Doctor of Medicine from the Miguel Hernández University with Extraordinary Doctorate Award
- Degree in Medicine from the University of Navarra

### Dr. Schargel Palacios, Konrad

- Ophthalmology specialist at the San Juan de Alicante Hospital
- Ophthalmologist specialist at the César Rodríguez Hospital
- Ophthalmologist specialist at the Luis Razzetti Hospital
- Member of the Spanish Glaucoma Society
- Examiner of the European Board of Ophthalmology

#### Dr. Belda Sanchís, José Isidro

- Medical Surgeon Ophthalmologist in Visionker
- Ophthalmologist at Ophthalmic Clinic
- Head of Service at the Torrevieja Health Department
- Member of the ophthalmologic team of Baviera Clinic.
- Head of the Ophthalmology Department of the University Hospital of Torrevieja.
- Training stays at the Bascom Palmer Eye Institute (Miami), the Moorfield Eye Hospital (London) and the Hospital for the Prevention of Blindness (Mexico City).
- Master's Degree in Integrated Health Services Management by ESADE
- Doctor Cum Laude from the University of Valencia.
- Degree in Medicine and Surgery from the University of Alicante.

### Dr. Font Juliá, Elsa

- \* Ophthalmologist at the San Juan de Alicante Hospital
- Specialist in Strabismus and Ocular Motility
- Degree in Medicine



### Course Management | 17 tech

### Dr. Duch Tuesta, Susana

- Director of the Glaucoma Unit of the Condal Institute of Ophthalmology.
- \* Coordinator of the Ocular Traumatology Unit of the Condal Institute of Ophthalmology.
- Director of the Ocular Traumatology Unit of ASEPEYO
- Associate Professor at Barcelona University
- Doctor of Medicine from the University of Barcelona
- Postgraduate in Glaucoma at the University of California (San Francisco, USA).

#### Dr. Martínez de la Casa, José María

- \* Specialist in Ophthalmology at the Martínez de la Casa Matilda Clinic.
- Ophthalmologist and head of the glaucoma department at the Clinical Hospital San Carlos.
- Degree in Medicine from the Complutense University of Madrid.
- Doctor in Medicine and Surgery, Complutense University of Madrid, Cum Laude.
- Master's Degree in Medical Administration and Clinical Management from the National Distance Education University
- Director of the Spanish Journal of Glaucoma and Ocular Hypertension.
- Member of the Editorial Board of the journals and Evaluator of different national and international journals.
- Deputy Director of Archives of the Spanish Society of Ophthalmology





### tech 20 | Structure and Content

### Module 1. Glaucoma Update

- 1.1. Diagnosis I: Intraocular Pressure and Pachymetry
- 1.2. Diagnosis II: Angle Study: Gonioscopy and Other Methods
- 1.3. Diagnosis III: Campimetry
- 1.4. Diagnosis IV: Analysis of the Papilla and the Nerve Fiber Layer.
- 1.5. Pathophysiology of Glaucoma and Classification
- 1.6. Treatment I: Medical
- 1.7. Treatment II: Laser
- 1.8. Treatment III: Filtering Surgery
- 1.9. Treatment IV: Surgery with Tube-Plate Drainage Implants and Cyclodestructive Procedures
- 1.10. New Perspectives in Glaucoma: The Future

### Module 2. Update in Ophthalmopediatrics

- 2.1. The Middle Ages, Modern Times, the Enlightenment
- 2.2. Management of Epiphora, Palpebral and Conjunctival-Corneal Pathology in Children
- 2.3. Amblyopia: Etiology, Diagnosis and Treatment
- 2.4. Vertical Strabismus, Alphabetic Syndromes and Restrictive Syndromes: Stilling-Duane, Brown, Möbius and Congential Fibrosis
- 2.5. Neuro-Ophthalmologic Pathology in Children
- 2.6. Glaucoma in Childhood
- 2.7. Differential Diagnosis of Leukocoria: Most Common Pathologies, Diagnosis and Treatment
- 2.8. Alterations of the Crystalline Lens in the Pediatrics. Congenital Cataracts
- 2.9. Diagnosis and Treatment of Nystagmus in Pediatrics
- 2.10. Botulinum Toxin in Strabology

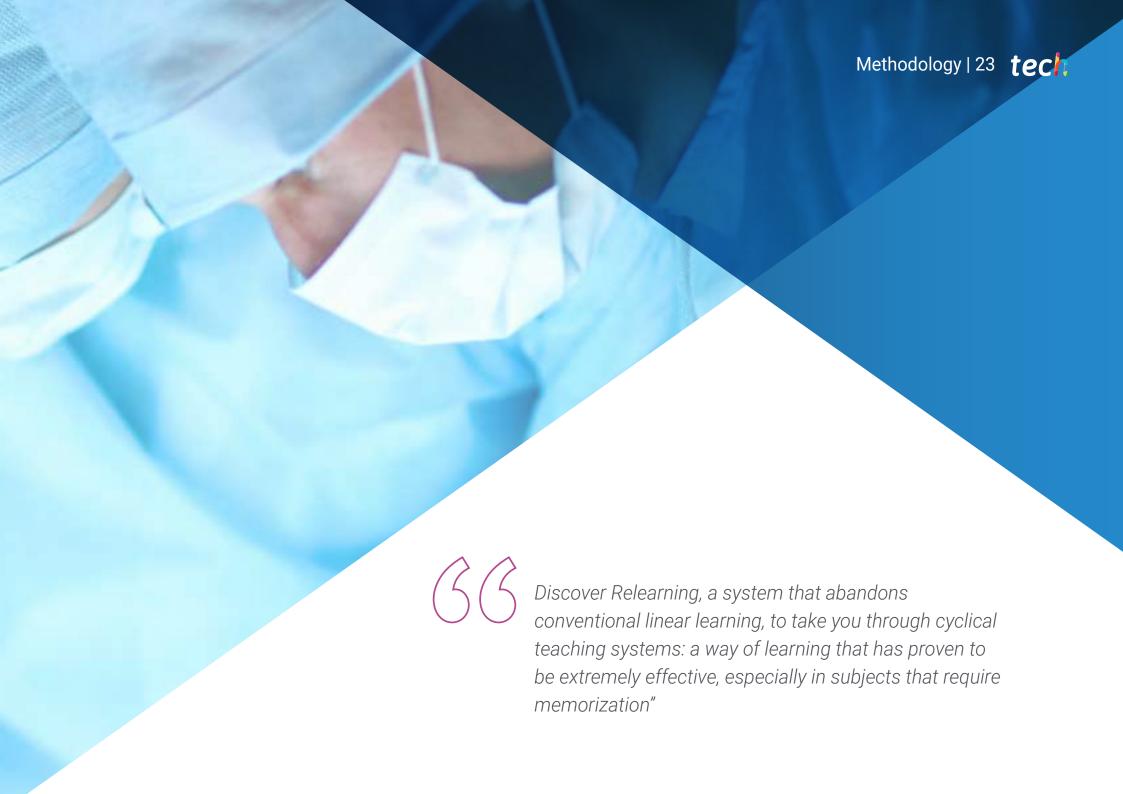












### tech 24 | Methodology

### 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 assess 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

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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





### Methodology | 27 tech

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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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.

### tech 28 | Methodology

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



#### **Study Material**

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

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



### **Surgical Techniques and Procedures on Video**

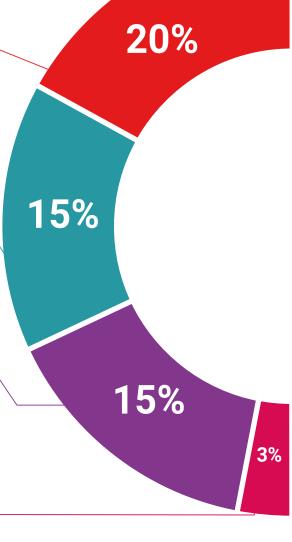
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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

### **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 assess and re-assess 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 on the usefulness of learning by observing experts.

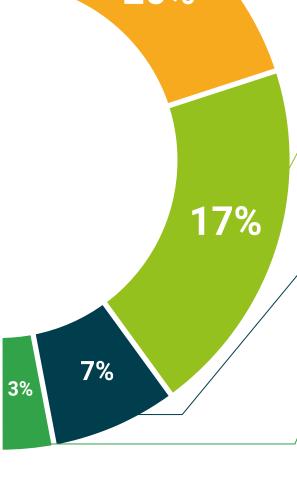
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.









### tech 32 | Certificate

This program will allow you to obtain a **Postgraduate Certificate in Glaucoma and Pediatric Ocular Pathology** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University**, is an official European University publicly recognized by the Government of Andorra (official bulletin). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University title**, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Glaucoma and Pediatric Ocular Pathology Modality: online

Accreditation: 12 ECTS

Official No of Hours: 300 hours.



Mr./Ms. \_\_\_\_\_\_has successfully passed and obtained the title of:

#### Postgraduate Certificate in Glaucoma and Pediatric Ocular Pathology

This is a private qualification of 300 hours of duration equivalent to 12 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



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

tech global university



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