

Professional Master's Degree

Pediatric Ophthalmology





Professional Master's Degree Pediatric Ophthalmology

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicine/professional-master-degree/professional-master-degree-pediatric-ophtalmology

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01

Introduction

Pediatric ophthalmology, a vitally important medical discipline in the field of pediatrics and neonatal health, is constantly facing new challenges and advances in the identification and treatment of eye conditions in children. In a world where healthy vision and the well-being of the very young are of the utmost priority, comprehensive and up-to-date research has become essential. In this context, TECH offers the present program as a necessary and valuable response, specifically designed to address these needs by providing medical professionals and specialists with the tools and expertise required to get up to speed in this critical specialty. All this in a 100% online format that is convenient and accessible.



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Keep up to date with the latest advances and developments in Pediatric Ophthalmology, ensuring your practice benefits from the latest research and technology”

In today's medical landscape, Pediatric Ophthalmology emerges as a discipline of vital importance in the care of children's health. In a world characterized by a constant flow of technological and scientific advances, as well as a change in the health care needs of the population, pediatric ophthalmology professionals face unique and crucial challenges.

The increasing incidence of eye disorders in children, as well as the complexity of diagnosing and treating these conditions in a population that is often unable to express their symptoms effectively, demands a level of competence and knowledge that evolves at the same pace as the changing demands of the field.

It is in this context that the Professional Master's Degree in Pediatric Ophthalmology stands as a comprehensive response to the challenges faced by specialists. This program has been meticulously designed to provide participants with a thorough and up-to-date understanding of pediatric ophthalmology today. Therefore, the degree is taught exclusively online, providing medical professionals and specialists with the necessary flexibility to access updated content without interrupting their clinical practice.

In this way, the specialist will have a diversity of multimedia content focused on the most rigorous clinical practice. Access to them is unrestricted, and they are an essential working guide that will continue to be useful even after completion of the program.

This **Professional Master's Degree in Pediatric Ophthalmology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Practical case studies presented by experts in Pediatric comprises
- ♦ 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 the self-assessment process can be carried out 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



Take advantage of the flexibility of our online program, designed to fit your professional schedule, and access all the up-to-date content without sacrificing your clinical commitment"



Get ready to face the most complex challenges in Pediatric Ophthalmology with this Professional Master's Degree"

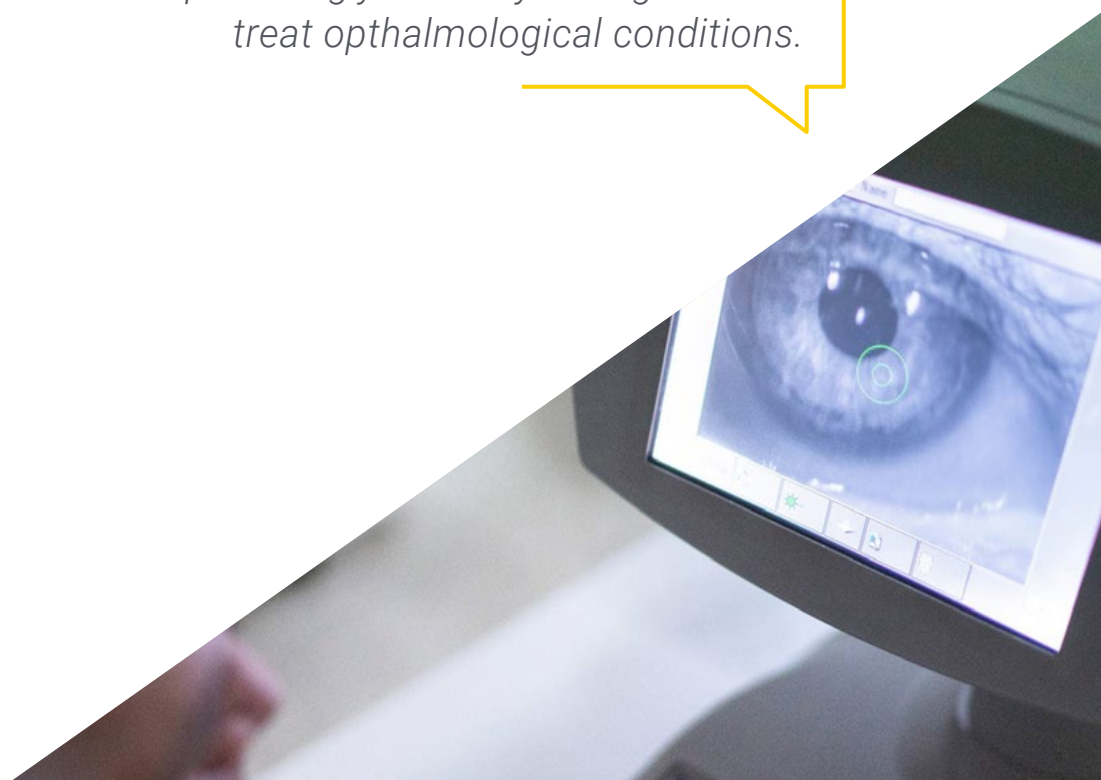
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Deepen in the early identification of visual problems in children, playing a crucial role in the preservation of vision.

Develop competencies directly applicable to your daily clinical practice, perfecting your ability to diagnose and treat ophthalmological conditions.



02

Objectives

This Professional Master's Degree in Pediatric Ophthalmology represents a unique opportunity for the specialist to strengthen their fundamental skills and adapt essential updates in this area of medicine. In addition, the program offers exclusive access to first-rate technological and educational tools, guaranteeing the success of the university experience.



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Master diagnostic and ophthalmologic evaluation techniques specific to the pediatric patient, ensuring accurate, high-quality results"



General Objectives

- ♦ Acquire a thorough and up-to-date knowledge of the diagnosis and treatment of ophthalmologic conditions in children, including neonates and infants
- ♦ Develop a solid understanding of the basics of childhood vision development, covering ocular embryology, related genetics, and the anatomy and physiology of the growing visual system
- ♦ Understand and address ocular anterior segment pathologies, including palpebral, orbital, conjunctival pathology, developmental alterations of the anterior segment, and corneal and ectatic diseases in the pediatric age group
- ♦ Become familiar with the diagnosis and management of pediatric glaucoma, pediatric uveitis, aniridia and other conditions related to the anterior segment
- ♦ Acquire specific knowledge of retinopathy of prematurity, retinoblastoma, hereditary retinal disorders, retinal vascular anomalies, pediatric retinal detachment, and other pediatric retinal conditions
- ♦ Delve into the field of pediatric neuro-ophthalmology, covering topics such as nystagmus, supranuclear motility disorders, congenital optic nerve anomalies and hereditary optic neuropathies





Specific Objectives

Module 1. Basis of Vision Development

- Understand the key processes of ocular embryology and their influence on visual development
- Identify the genetic basis of pediatric ocular diseases and their clinical relevance
- Differentiate between the pediatric and adult visual system, highlighting clinical implications
- Study the anatomy and function of sensory structures in the pediatric eye
- Understand the physiologic processes underlying visual perception in children
- Analyze the importance of the development of binocular vision in infancy and its clinical consequences
- Identify the milestones of binocular development and their relationship to three-dimensional vision
- Study the anatomy and function of the ocular muscles in children and their role in eye movements
- Recognize ocular motility disorders in pediatric patients and their management
- Identify visual disturbances in children and their implication in the diagnosis
- Diagnose and address ocular deviations in children
- Interpret test results for the diagnosis of visual disorders in children
- Become familiar with ophthalmic medications used in pediatric treatment and their safe administration
- Understand the indications and contra-indications of ocular drugs in children
- Identify the criteria and procedures for visual screening in the pediatric population

Module 2. Refraction, Amblyopia and Congenital Cataract

- Understand basic optical principles and their relationship to ocular refraction
- Identify accommodative disorders, such as accommodative insufficiency, and its diagnosis in children
- Recognize amblyopia as a common visual problem in childhood and its causes
- Evaluate visual function in pediatric patients with amblyopia
- Identify leukocoria as a warning sign of severe ocular disease in children
- Understand the characteristics and causes of congenital cataract in children
- Deepen the surgical treatment options for congenital cataract in the pediatric population
- Address complications and follow-up of children with congenital cataract
- Study more complex cases of congenital cataract and its surgical solutions
- Know the strategies to rehabilitate vision in children with congenital cataract

Module 3. Anterior Segment Pathology

- Identify and diagnose common pediatric palpebral conditions
- Know the treatment options for palpebral disorders in children
- Understand congenital ptosis and its impact on children's vision
- Analyze pediatric orbital diseases and conditions, such as cellulitis
- Identify the clinical signs and management of orbital pathology in children
- Recognize pediatric orbital tumors and their early diagnosis
- Identify common pediatric ocular infections and their management
- Understand the causes and treatment of conjunctival inflammation in children in the pediatric population

- ♦ Differentiate between allergic and non-allergic conjunctivitis in children
- ♦ Study the congenital alterations of the anterior ocular segment and their diagnosis
- ♦ Identify the clinical implications and treatment options in cases of malformations
- ♦ Deepen in the developmental alterations of the anterior segment, such as anterior chamber anomalies
- ♦ Recognize corneal and ectatic disorders in children, such as keratoconus

Module 4. Anterior Segment Pathology I

- ♦ Understand the pathophysiology and clinical manifestations of primary congenital glaucoma
- ♦ Identify and differentiate juvenile glaucoma from other forms of pediatric glaucoma
- ♦ Recognize and diagnose secondary glaucomas in children, such as aphakic glaucoma
- ♦ Identify the most common causes of uveitis in children and their initial management
- ♦ Differentiate between types of anterior uveitis in children and their clinical manifestations
- ♦ Study intermediate uveitis in childhood and its relation to systemic diseases
- ♦ Recognize posterior uveitis and its complications in children
- ♦ Understand the characteristics of aniridia and its association with other ocular problems

Module 5. Pediatric Retina

- ♦ Identify the clinical and genetic characteristics of retinoblastoma in children
- ♦ Address therapeutic strategies for retinoblastoma in the pediatric population
- ♦ Understand the importance of multidisciplinary management in cases of retinoblastoma
- ♦ Studying the retinopathy of Childhood its risk factors

- ♦ Deepen in the advanced stages of ROP and its clinical implications
- ♦ Identify inherited retinal disorders in childhood and their natural history
- ♦ Evaluate prognosis and treatment options for retinal disorders in children
- ♦ Recognize genetic syndromes associated with retinal disorders in children
- ♦ Study rare retinal disorders in childhood and their diagnosis
- ♦ Identify retinal vascular anomalies in children and their association with visual problems
- ♦ Recognize acquired disorders of the pediatric retina, such as inflammatory retinopathies
- ♦ Evaluate cases of retinal detachment in children and their etiology

Module 6. Childhood Strabismus

- ♦ Understand the basic concepts behind computer systems
- ♦ Recognize the importance of early detection of strabismus in the pediatric population
- ♦ Identify and differentiate endotropias in children
- ♦ Evaluate Non-Surgical Treatment Options and surgical
- ♦ Recognize and classify exotropia in children
- ♦ Study vertical strabismus in childhood and its clinical implications
- ♦ Identify alphabetic patterns of strabismus in children and their diagnosis
- ♦ Understand congenital cranial disinnervative disorders and their relationship to strabismus
- ♦ Recognize oculomotor palsies in the pediatric population and their causes
- ♦ Study non-surgical treatment options, such as vision therapy, for pediatric strabismus
- ♦ Evaluate postoperative outcomes and make adjustments when necessary
- ♦ Recognize and address potential complications following strabismus surgery in children

Module 7. Pediatric Neuro-Ophthalmology

- ♦ Identify types of nystagmus in children and their classification
- ♦ Deepen the knowledge of the mechanisms and causes of infantile nystagmus
- ♦ Study supranuclear and internuclear ocular motility disorders in childhood
- ♦ Perform specialized testing and evaluation of pediatric patients with these disorders
- ♦ Identify congenital anomalies of the optic nerve in children and their association with visual problems
- ♦ Recognize hereditary optic neuropathies in childhood and their features
- ♦ Understand optic atrophy in children and its causes
- ♦ Identify cases of optic neuritis in children and its relation to systemic diseases
- ♦ Differentiate between pseudopapilledema and papillary edema in the pediatric population
- ♦ Identify papillary edema and its relation to intracranial hypertension in children
- ♦ Recognize pupillary abnormalities in children and their importance in neurological diagnosis

Module 8. Functional Aspects of Vision and Associated Disorders

- ♦ Understand the characteristics of CVI in the pediatric population
- ♦ Deepen knowledge of intervention strategies for children with CVI
- ♦ Identify and evaluate visual maturational delay in childhood
- ♦ Recognize the visual implications of prematurity syndrome
- ♦ Study the ophthalmologic manifestations in children with infantile cerebral palsy
- ♦ Deepen in treatment strategies and visual rehabilitation in children with infantile cerebral palsy

- ♦ Identify and solve common visual problems in children with visual impairment
- ♦ Understand the importance of Simulation in the training of health professionals
- ♦ Recognize disorders related to vision and reading, such as dyslexia and cross laterality

Module 9. Ophthalmic Manifestations of Systemic Pathology

- ♦ Identify phacomatosis with ophthalmic and systemic manifestations
- ♦ Recognize neurofibromatosis and its ophthalmologic implications
- ♦ Evaluate ophthalmologic manifestations of CNS tumors in children
- ♦ Identify ocular manifestations of leukemia and neuroblastoma in children
- ♦ Integrate the ophthalmologic approach in the multidisciplinary management of these disorders
- ♦ Understand mitochondrial pathology and its impact on visual function
- ♦ Identify neurometabolic disorders with ophthalmologic manifestations
- ♦ Assess the ophthalmologic consequences of intrauterine disorders and perinatal infections
- ♦ Recognize systemic pathologies, such as albinism and Marfan syndrome, with ophthalmologic manifestations
- ♦ Identify signs of child abuse and their relationship to eye injuries

Module 10. Practical Management of Special Situations in Pediatric Ophthalmology

- Identify cases of juvenile idiopathic arthritis (JIA) with ophthalmologic manifestations
- Evaluate cases of persistent epiphora in children after lacrimal duct probing
- Establish criteria for treatment and follow-up in patients with ROP
- Evaluate cases of papillary effacement in children and its relationship to medical conditions
- Identify causes of anisocoria in children and perform accurate evaluations
- Recognize papillary pallor in children and its clinical relevance
- Identify and differentiate types of abnormal eye movements in pediatric population





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Access world-class education from the comfort of your home, with up-to-date materials and interactive content”

03 Skills

The Professional Master's Degree in Pediatric Ophthalmology will provide the specialist with the opportunity to acquire a wide range of crucial competencies in the field of pediatric ophthalmology. In addition to developing an up-to-date understanding of ocular anatomy and physiology specific to children, they will hone their skills in the accurate diagnosis of pediatric ophthalmic conditions and become familiar with state-of-the-art treatment options. Emphasis will also be placed on effective communication with pediatric patients and their families, taking into account psychosocial aspects and a practical approach based on the experience of the best specialists in the field.





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Delve into the specific anatomy and physiology of children's eyes based on the latest scientific postulates on the subject"



General Skills

- Explore the anatomical and functional growth of the components of the visual system in infancy
- Train professionals to conduct detailed screening of visual and motor skills in children, including early detection of potential problems
- Provide the necessary tools to evaluate and manage refractive disorders, accommodative anomalies, amblyopia, leukocoria, congenital cataract and other pediatric ophthalmic conditions
- Develop skills for the diagnosis and treatment of strabismus disorders in children, including endotropia, exotropia and vertical strabismus, as well as oculomotor palsies and surgical complications
- Prepare practitioners to address special and challenging situations in pediatric ophthalmology, including children with low vision, infantile cerebral palsy, prematurity syndrome, and visual developmental disorders, such as dyslexia



Delve into the latest scientific evidence for early identification of visual problems and strabismus in children"





Specific Skills

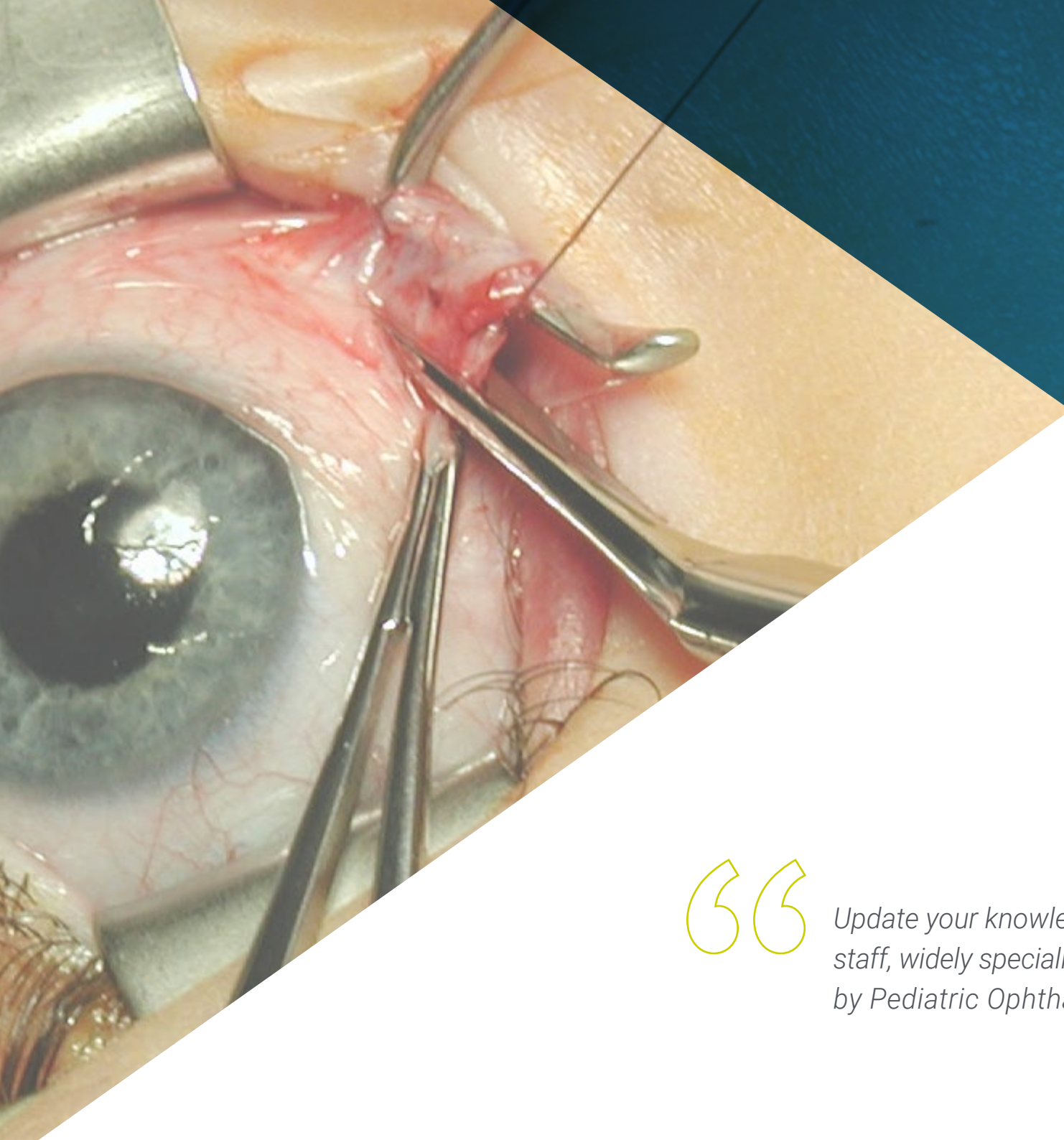
- ◆ Perform accurate clinical assessments of eye movements and ocular alignment
- ◆ Know and apply electrophysiologic testing and other diagnostic tools in pediatric ophthalmology
- ◆ Identify and correct ametropia in pediatric patients
- ◆ Implement effective therapies to improve vision in patients with amblyopia
- ◆ Perform a thorough evaluation and differential diagnosis of leukocoria cases in pediatrics
- ◆ Perform early diagnosis of congenital cataracts and their initial management
- ◆ Therapeutically approach orbital tumors in the pediatric population
- ◆ Perform a comprehensive evaluation of pediatric patients with glaucoma
- ◆ Perform evaluation and treatment of intermediate uveitis in pediatric patients
- ◆ Apply treatments and strategies to improve the quality of life of pediatric patients with aniridia
- ◆ Surgically approach cases of advanced rop and complications
- ◆ Approach genetic counseling and support for families with children affected by inherited disorders
- ◆ Apply targeted treatments in cases of retinal vascular anomalies
- ◆ Perform surgical procedures to correct retinal detachment in the pediatric population
- ◆ Establish appropriate management plans for exotropia in the pediatric population
- ◆ Evaluate and treat cranial disinnervative disorders in children
- ◆ Develop skills in planning and performing strabismus surgery in pediatric patients
- ◆ Perform accurate evaluation and diagnosis of pediatric nystagmus cases
- ◆ Evaluate and manage pediatric optic atrophy cases
- ◆ Therapeutically approach optic neuritis in pediatric patients
- ◆ Perform accurate evaluation and diagnosis of CVI in children
- ◆ Implement intervention plans to stimulate visual development in children with maturational delay
- ◆ Collaborate in multidisciplinary teams for the comprehensive management of patients with infantile cerebral palsy
- ◆ Establish interdisciplinary management plans for patients with phacomatosis
- ◆ Perform emergency ophthalmologic procedures in traumatic situations
- ◆ Collaborate with health and social service professionals in the protection and care of child victims of abuse
- ◆ Recognize and treat neonatal conjunctivitis, considering infectious and non-infectious causes
- ◆ Collaborate with rheumatologists and other specialists in the comprehensive management of children with JIA
- ◆ Perform screening for retinopathy of prematurity (ROP) in preterm infants
- ◆ Perform screening and follow-up of patients with papillary pallor

04

Course Management

TECH is at the forefront of education, offering an unparalleled level of academic excellence. In this context, specialists will have access to a wide range of resources created by a highly specialized faculty in Pediatric Ophthalmology. The wealth of their experience and deep knowledge of the area enriches all the material provided, adhering to the most demanding clinical practice.





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Update your knowledge with the best teaching staff, widely specialized in all the fields covered by Pediatric Ophthalmology"

Management



Dr. Sánchez Monroy, Jorge

- ♦ Corresponsable for Pediatric Ophthalmology at Quirónsalud Hospital in Zaragoza
- ♦ Specialist in the Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Master'in in Clinical Ophthalmology from UCJC
- ♦ Degree in Medicine from the University of Zaragoza
- ♦ Expert in Pediatric Neurophthalmology and Strabismus
- ♦ Postgraduate Diploma in Ophthalmology and Vision Sciences

Professors

Dr. Romero Sanz, María

- ♦ Corresponsable for Children's Ophthalmology at Hospital Quirónsalud Zaragoza
- ♦ Specialist in the Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Master' in in Clinical Ophthalmology at CEU Cardenal Herrera University
- ♦ Master's Degree in Clinical Medicine at the Camilo José Cela University
- ♦ Grade in Medicine and Surgery from the Faculty of Medicine of the Zaragoza University
- ♦ Expert in Ophthalmic Surgery at the University CEU Cardenal Herrera
- ♦ Expert in Pathologies and Eye Treatment CEU Cardenal Herrera University
- ♦ Expert in Uveitis and the Retina CEU Cardenal Herrera University

Dr. González Viejo, Inmaculada

- ♦ Specialist in the Pediatric Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Area Specialist in Psychiatry
- ♦ Member of the Spanish Society of Ophthalmology
- ♦ Member of the Spanish Society of Strabology
- ♦ Professor for the Ophthalmology Degree in Orthodontics, CEU Cardenal Herrera University
- ♦ Bachelor in Medicine and Surgery from the University of Zaragoza

Dr. Prieto Calvo, Esther

- ♦ Specialist in the Pediatric Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Researcher in the Teaching Innovation Incentive Project of the UZ
- ♦ Researcher of the Thematic Network of Cooperative Research in Health
- ♦ Specialist in Ophthalmology
- ♦ Doctor from the University of Zaragoza
- ♦ Degree in Medicine
- ♦ Member of the Spanish Society of Pediatric Ophthalmology

Dr. Pueyo Royo, Victoria

- ♦ Specialist in the Pediatric Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Member of the Maternal, Child and Developmental Health Network
- ♦ Professor, Grade of Optics and Optometry, University of Zaragoza
- ♦ Grade in Pediatric Ophthalmology

Dr. Narváez Palazón, Carlos

- ♦ Attending Physician in Pediatric Ophthalmology
- ♦ Specialist in Ophthalmology in San Carlos Clinical Hospital
- ♦ Doctor in Ophthalmology
- ♦ Master's Degree in Integration and Clinical Cases Solving from the University of Alcalá, Spain
- ♦ Master's Degree in Clinical Management, Medical and Healthcare Management from the CEU San Pablo University

Dr. Noval Martin, Susana

- ♦ Head of the Pediatric Ophthalmology Department at Hospital La Paz
- ♦ Doctorate Award of the Lopez Sanchez Foundation of the Royal Academy of Medicine
- ♦ PhD in Medicine from the University of Alcalá de Henares
- ♦ Master's Degree in Neuro-immunology from Autonomous University Madrid
- ♦ Degree in Medicine from the Autonomous University Madrid

Dr. D'anna Mardero, Oriana

- ♦ Attending physician at the the Pediatrics Unit of the la Paz University Hospital from Madrid
- ♦ Area Specialist in Hospitals of the Public Health System
- ♦ Doctor in Ophthalmology
- ♦ Degree in Medicine and Surgery from UCLA

Dr. Pinilla, Juan

- ♦ Attending Physician of Pediatric Ophthalmology Unit, Miguel Servet University Hospital
- ♦ Specialist in the Pediatric Ophthalmology Miguel Servet University Hospital in Zaragoza
- ♦ Doctorate in Medicine and Surgery, University of Zaragoza
- ♦ Professional Master's in Initiation to Research in Medicine
- ♦ Degree in Medicine from the University of Zaragoza

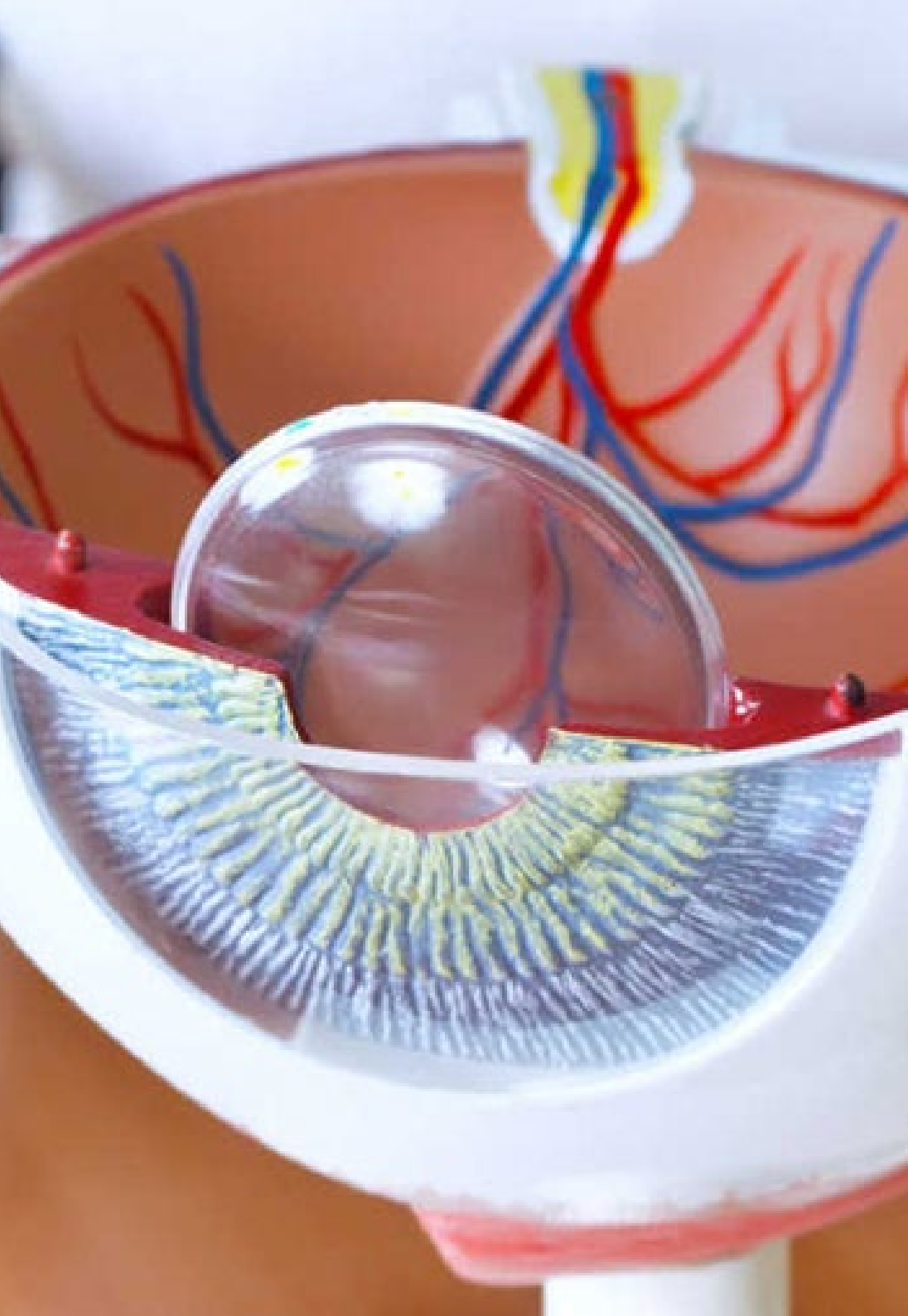
Dr. Sanz Pozo, Claudia

- Ophthalmology Attachments at Quirónsalud Hospital in Zaragoza
- Specialist in Ophthalmology at the at Quironsalud Hospital in Zaragoza
- Master's Degree in Clinical Ophthalmology at Cardenal Herrera University
- Degree in Medicine and Surgery from the Faculty of Medicine of the Zaragoza University
- Expert in Retina and the Uveitis Cardenal Herrera University
- Expert in Ophthalmologic Surgery at Universidad Cardenal Herrera
- Expert in Glaucoma and Pediatric Ocular Pathology at Cardenal Herrera University
- Expert in Ocular Diseases and Treatment Cardenal Herrera University

Dr. Arias Del Peso, Borja

- Ophthalmology Assistant Physician in
- Clinical Research
- Doctor in Ophthalmology
- Master's Degree in Image-Based Diagnosis of Retinal Pathology
- Professional Master's in Initiation to Research in Medicine
- Degree in Medicine





Dr. Munuera Rufas, Inés

- ◆ Ophthalmology Assistant Physician in
- ◆ Researcher in the FIS Project of the Instituto de Investigación Sanitaria de Aragón (ISSA)
- ◆ Doctor in Ophthalmology
- ◆ Master's Degree in Clinical Medicine from the Camilo José Cela University
- ◆ PROFESSIONAL MASTER'S DEGREE in Ophthalmology Medicine from Cardenal Herrera University
- ◆ Graduate in Medicine
- ◆ University Expert in Ophthalmic Surgery, Glaucoma and Pediatric Ocular Pathology, Ocular Pathologies and Treatment and Uveitis and Retina, by Cardenal Herrera University
- ◆ Member of the Miguel Servet Ophthalmology Research and Innovation Group (GIMSO)

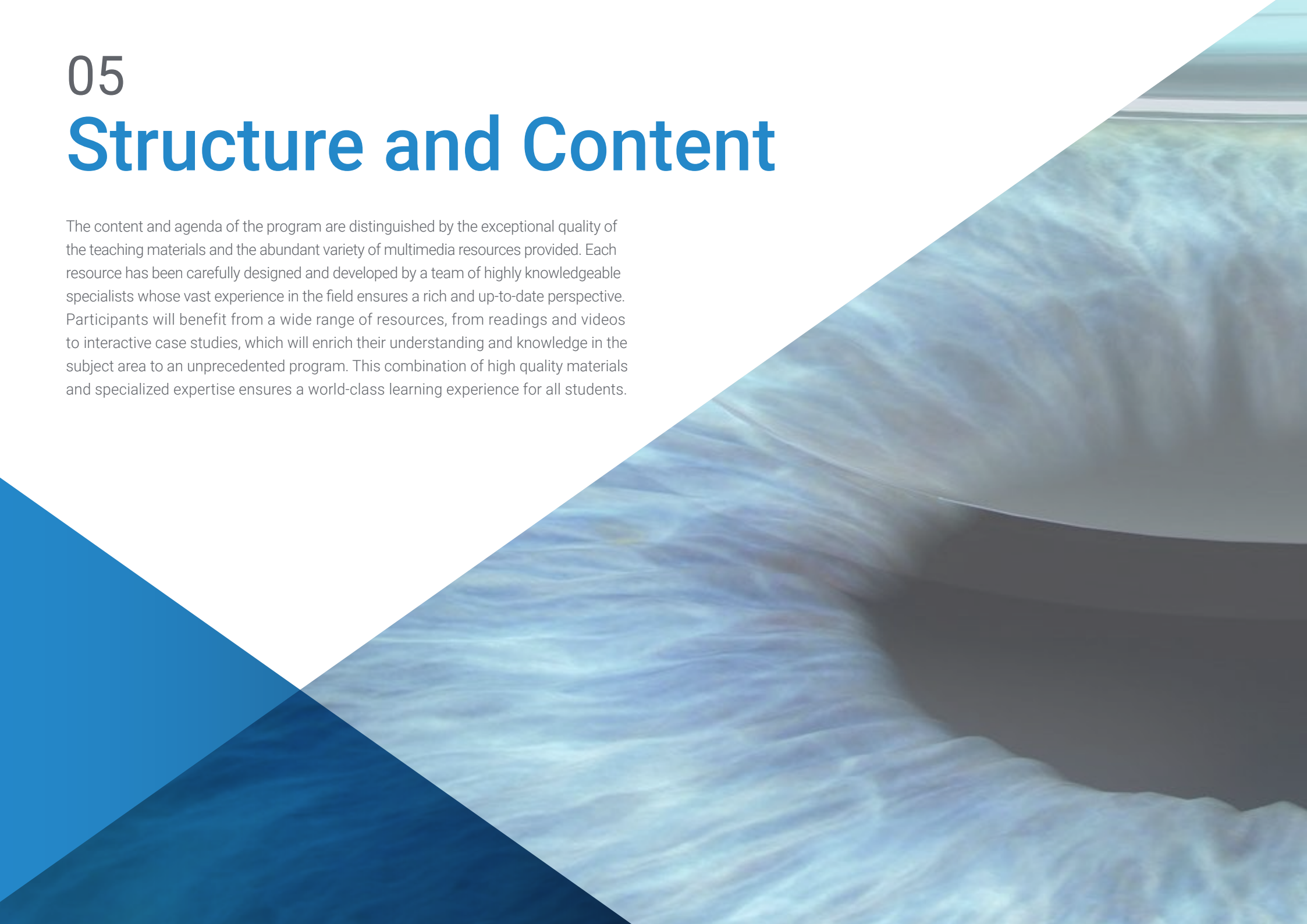
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A unique, key, and decisive educational experience to boost your professional development”

05

Structure and Content

The content and agenda of the program are distinguished by the exceptional quality of the teaching materials and the abundant variety of multimedia resources provided. Each resource has been carefully designed and developed by a team of highly knowledgeable specialists whose vast experience in the field ensures a rich and up-to-date perspective. Participants will benefit from a wide range of resources, from readings and videos to interactive case studies, which will enrich their understanding and knowledge in the subject area to an unprecedented program. This combination of high quality materials and specialized expertise ensures a world-class learning experience for all students.



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Enjoy a top-notch refresher experience, backed by high-quality materials and the expertise of experts in Pediatric Ophthalmology"

Module 1. Basis of Vision Development

- 1.1. Ocular embryology and genetics
 - 1.1.1. Embryonic Period
 - 1.1.2. Development of the optic nerve, retina, vitreous, retinal and choroidal vasculature
 - 1.1.3. Development of the lens and anterior pole
 - 1.1.4. Eyelid and Lacrimal System Development
 - 1.1.5. Development of the orbit and extraocular musculature
- 1.2. The growing visual system
 - 1.2.1. Development of functional parameters
 - 1.2.2. Anatomy Development of the Eye
 - 1.2.3. Conclusions
- 1.3. Anatomy and Physiology of sensory perception
 - 1.3.1. Anatomy and Physiology of Retina
 - 1.3.2. Classical visual pathway and extrageniculate pathways
 - 1.3.3. The Visual Cortex Maturation. of Cortex in the Childhood
- 1.4. Binocularity and associated processes
 - 1.4.1. Monocular aspects of sensory perception
 - 1.4.2. Binocular aspects of sensory perception
 - 1.4.3. Sensory adaptations to abnormal visual stimuli
 - 1.4.5. Anatomophysiological basis of amblyopia
- 1.5. Anatomy and Physiology of Ocular Motility:
 - 1.5.1. Extraocular Muscles
 - 1.5.2. Cranial Nerves
 - 1.5.3. Ductions and versions. Sherrington and Hering's Laws
 - 1.5.4. Fixation movements, saccadic and slow tracking movements
 - 1.5.5. Vergences and ocular reflexes
 - 1.5.6. Ocular Motility:
- 1.6. Exploration of the sensory area
 - 1.6.1. Visual acuity
 - 1.6.2. Fusion
 - 1.6.3. Stereopsis
 - 1.6.4. Study of the visual field in the pediatric age

- 1.7. Exploration of the motor area and ocular deviation
 - 1.7.1. Translations and versions
 - 1.7.2. Convergence
 - 1.7.3. Fusional vergences
 - 1.7.4. Hirschberg and Krimsky
 - 1.7.5. Cover test and its variants, biprism and prismatic adaptation test
 - 1.7.6. Compatibility Study
 - 1.7.7. Synoptophore, Hess and video-oculography screens
- 1.8. Ocular electrophysiology and other tests
 - 1.8.1. Basic Concepts of bioelectrical
 - 1.8.2. Diffuse flash electroretinogram waves
 - 1.8.3. Multifocal electroretinogram and pattern electroretinogram
 - 1.8.4. Visual Evoked Potentials
 - 1.8.5. Electrooculogram
 - 1.8.6. Electromyography of extraocular muscles
- 1.9. Pharmacology Ocular Pediatrics
 - 1.9.1. Special considerations of metabolism and pharmacology in infancy
 - 1.9.2. Ocular pharmacology in childhood: drug groups
 - 1.9.3. Others Routes of Administration
- 1.10. Childhood Visual Screening
 - 1.10.1. Importance and objectives of visual screening
 - 1.10.2. Methods and tools for visual screening in infancy
 - 1.10.3. Implementation and organization of a visual screening program
 - 1.10.4. Evaluation of the effectiveness of the visual screening program

Module 2. Refraction, Amblyopia and Congenital Cataract

- 2.1. Fundamentals of Optics and Refraction I
 - 2.1.1. Light and refraction laws
 - 2.1.2. Optical elements of the eye
 - 2.1.3. Basic Concepts of Accommodation
 - 2.1.4. Optical aberrations, dispersion and diffraction Polarization Polarization
 - 2.1.5. Basic concepts of ametropia

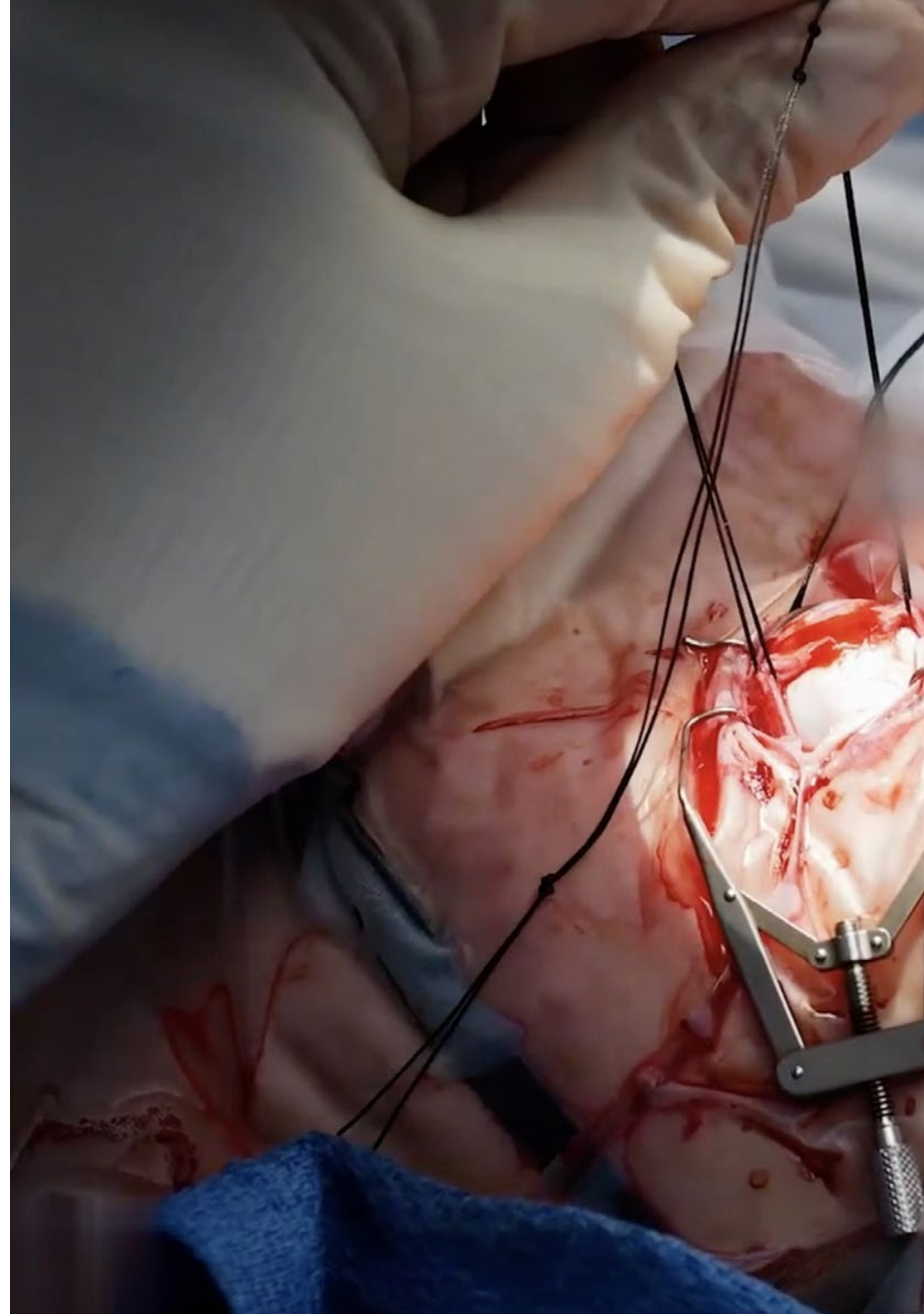
- 2.2. Fundamentals of Optics and Refraction II
 - 2.2.1. Objective and subjective refraction
 - 2.2.2. Visual therapy: general lines
 - 2.2.3. Pediatric contact lens therapy: aphakia, myopia control and ortho-K
 - 2.2.4. New technologies and advances in pediatric refractive correction
- 2.3. Specimen Handling
 - 2.3.1. Childhood Education
 - 2.3.2. Hyperopia in children
 - 2.3.3. Astigmatism in Pediatric La Population
 - 2.3.4. Contemporary approaches in the management of refractive errors
- 2.4. Accommodation Disorders
 - 2.4.1. Role of accommodation in infant vision
 - 2.4.2. Assessment and diagnosis of accommodation insufficiency
 - 2.4.3. Excess convergence and its impact on vision
 - 2.4.4. Clinical cases and challenges in the treatment of accommodation disorders
- 2.5. Amblyopia
 - 2.5.1. Definition and Diagnoses of the Amblyopia
 - 2.5.2. Risk factors and causes of amblyopia in children
 - 2.5.3. Assessment of Stereoscopic Visual Acuity
 - 2.5.4. Vision Amblyopia and Diseases
- 2.6. Amblyopia: treatment
 - 2.6.1. Occlusive therapy and penalization
 - 2.6.2. Reverse occlusion and atropine therapy
 - 2.6.3. Therapy of amblyopia in adults
 - 2.6.4. Follow-up and long-term results in amblyopia therapy
- 2.7. Leukocoria
 - 2.7.1. Definition and Characteristics of a Leukocoria
 - 2.7.2. Causes of Leukocoria in the Childhood
 - 2.7.3. Ophthalmologic diagnosis and evaluation
 - 2.7.4. Retinoblastoma: Diagnosis and Treatment
 - 2.7.5. Multidisciplinary approach to leukocoria cases
 - 2.7.6. Other conditions associated with leukocoria

- 2.8. Congenital Cataracts
 - 2.8.1. Diagnosis and Classification of Lymphedema
 - 2.8.2. Medical and Surgical Treatment of Toxocariasis
 - 2.8.3. Complications and follow-up in congenital cataracts
 - 2.8.4. Clinical cases and special considerations
- 2.9. Congenital Cataracts
 - 2.9.1. Congenital cataract-associated anomalies
 - 2.9.2. Management of cataracts in premature infants
 - 2.9.3. Traumatic cataracts in children
 - 2.9.4. Innovations in pediatric cataract surgery
- 2.10. Congenital Cataract III
 - 2.10.1. Visual development in children with congenital cataracts
 - 2.10.2. Visual rehabilitation in cataract patients
 - 2.10.3. Research and advances in the treatment of pediatric cataracts
 - 2.10.4. Success and prognosis in the management of congenital cataracts

Module 3. Anterior Segment Pathology I

- 3.1. Palpebral Pathologies
 - 3.1.1. Palpebral infections
 - 3.1.2. Palpebral malformations
 - 3.1.3. Palpebral trauma
 - 3.1.4. Conservational Treatment
- 3.2. Palpebral Pathologies Congenital Aponeurotic Ptosis
 - 3.2.1. Diagnosis and Classification of Lymphedema
 - 3.2.2. Eyelid levator muscle assessment
 - 3.2.3. Surgical treatment of ptosis in children
 - 3.2.4. Long term results in congenital ptosis
- 3.3. Orbital pathology
 - 3.3.1. Clinical and imaging evaluation of orbital pathology
 - 3.3.2. Orbital inflammation in children
 - 3.3.3. Orbital vascular and malformative lesions
 - 3.3.4. Medical History in the Pediatric Population

- 3.4. Orbital Pathology II. Tumors
 - 3.4.1. Benign orbital tumors in children
 - 3.4.2. Malignant tumors of the pediatric orbit
 - 3.4.3. Multidisciplinary approach in orbital tumors
 - 3.4.4. Clinical cases and case studies
- 3.5. Congenital lacrimal obstruction and other lacrimal pathology
 - 3.5.1. Diagnosis of lacrimal obstruction in infants and children
 - 3.5.2. Medical and Surgical Treatment
 - 3.5.3. Lacrimal Pathology Obstructive in Childhood
 - 3.5.4. Management of dacryocystitis and other lacrimal problems
- 3.6. Conjunctival pathology I. Infectious
 - 3.6.1. Bacterial conjunctivitis in children
 - 3.6.2. Medical History in the Pediatric Population
 - 3.6.3. Fungal and parasitic conjunctivitis in children
 - 3.6.4. Infectious Conjunctivitis Treatment and Prevention
- 3.7. conjunctival Pathology II. Inflammatory
 - 3.7.1. Allergic conjunctivitis in children
 - 3.7.2. Conjunctivitis Associated With Systemic Diseases
 - 3.7.3. Giant Papillary Conjunctivitis
 - 3.7.4. Management strategies in inflammatory conjunctivitis
- 3.8. Developmental alterations of the anterior segment I
 - 3.8.1. Embryology and normal development of the anterior segment
 - 3.8.2. Congenital malformations of the anterior segment
 - 3.8.3. Clinical Analysis Evaluation and Differential Diagnosis
 - 3.8.4. Treatment of congenital anomalies of the anterior segment
- 3.9. Developmental disorders of the anterior segment II
 - 3.9.1. Anomalies of the lens and capsule
 - 3.9.2. Abnormalities of the iris and pupil
 - 3.9.3. Disorders of the anterior chamber and iridocorneal angle
 - 3.9.4. Surgical approach to anterior segment anomalies
- 3.10. Corneal and-Ophthalmologic Pathology in Children
 - 3.10.1. Evaluation of the corneal surface in children
 - 3.10.2. Corneal infections in the pediatric population
 - 3.10.3. Corneal ectasias in children
 - 3.10.4. Medical and surgical treatments in pediatric corneal pathology



Module 4. Anterior Segment Pathology II

- 4.1. Evaluation of the Pediatric Glaucoma Patient
 - 4.1.1. Clinical evaluation in pediatric glaucoma
 - 4.1.2. Diagnostic tests in pediatric glaucoma
 - 4.1.3. Risk Factors in Trauma
 - 4.1.4. Clinical cases in pediatric glaucoma
- 4.2. Congenital Glaucoma
 - 4.2.1. Diagnosis and classification of primary congenital glaucoma
 - 4.2.2. Medical and surgical management of pediatric glaucoma
 - 4.2.3. Trabeculotomy and other surgical techniques in pediatric glaucoma
 - 4.2.4. Long-term results in congenital glaucoma
- 4.3. Juvenile glaucoma
 - 4.3.1. Characteristics and diagnosis of juvenile glaucoma
 - 4.3.2. Treatments in juvenile glaucoma
 - 4.3.3. Follow-up strategies in young patients with glaucoma
 - 4.3.4. Secondary juvenile glaucoma and other pathologies
- 4.4. Other glaucomas: aphakic glaucoma and associated with other pathologies
 - 4.4.1. Aphakic glaucoma in children: causes and management
 - 4.4.2. Glaucomas secondary to pediatric ocular disease
 - 4.4.3. Evaluation and treatment in secondary glaucomas
 - 4.4.4. Case studies in glaucomas associated with other pathologies
- 4.5. Treatment and follow-up in pediatric glaucoma
 - 4.5.1. Medical and pharmacological treatments in pediatric glaucoma
 - 4.5.2. Surgery in pediatric glaucoma: techniques and results
 - 4.5.3. Long-term follow-up and management of complications in glaucoma
 - 4.5.4. Comprehensive approach to the pediatric glaucoma patient
- 4.6. Pediatric uveitis II. Examination and Diagnosis
 - 4.6.1. Ophthalmologic evaluation in pediatric uveitis
 - 4.6.2. Differential diagnosis and diagnostic tests in infantile uveitis
 - 4.6.3. Importance of the anamnesis in pediatric uveitis
 - 4.6.4. Management of clinical cases in pediatric uveitis

- 4.7. Pediatric uveitis II. Anterior uveitis
 - 4.7.1. Characteristics and diagnosis of anterior uveitis in children
 - 4.7.2. Medical treatment and management of anterior inflammation in pediatric uveitis
 - 4.7.3. Anterior uveitis associated with systemic diseases in childhood
 - 4.7.4. Follow-up in pediatric anterior uveitis
- 4.8. Pediatric uveitis III. Intermediate Uveitis
 - 4.8.1. Clinical evaluation and diagnosis of intermediate uveitis in children
 - 4.8.2. Treatment and control of inflammation in pediatric intermediate uveitis
 - 4.8.3. Complications and case management in intermediate uveitis
 - 4.8.4. Multidisciplinary approach in pediatric intermediate uveitis
- 4.9. Pediatric uveitis IV. Posterior uveitis
 - 4.9.1. Posterior uveitis in children: Causes and diagnosis
 - 4.9.2. Therapies and treatments in pediatric posterior uveitis
 - 4.9.3. Long-term follow-up and prognosis in posterior uveitis
 - 4.9.4. Clinical cases and case studies in pediatric posterior uveitis
- 4.10. Aniridia
 - 4.10.1. Clinical features and diagnosis of aniridia
 - 4.10.2. Multidisciplinary approach in patients with aniridia
 - 4.10.3. Treatments and follow-up in pediatric aniridia
 - 4.10.4. Visual outcomes and management of complications in aniridia

Module 5. Pediatric Retina

- 5.1. Retinoblastoma
 - 5.1.1. Epidemiology and Risk Factors
 - 5.1.2. Diagnosis and classification of retinoblastoma
 - 5.1.3. Treatment methods: enucleation and eye preservation
 - 5.1.4. Outcome and follow-up in retinoblastoma
- 5.2. Retinoblastoma: treatment
 - 5.2.1. Advanced treatments in retinoblastoma
 - 5.2.2. Complications and management of side effects
 - 5.2.3. Survival and quality of life in patients with retinoblastoma
 - 5.2.4. Clinical cases and case studies in retinoblastoma
- 5.3. Retinopathy of Prematurity
 - 5.3.1. Pathophysiology of retinopathy of prematurity
 - 5.3.2. Staging of ROP
 - 5.3.3. Evaluation and diagnosis of ROP
 - 5.3.4. Long-term outcomes in ROP
- 5.4. Retinopathy of prematurity: treatment and follow-up
 - 5.4.1. Therapeutic management options in retinopathy of prematurity
 - 5.4.2. Long-term follow-up and care in patients with ROP
 - 5.4.3. Prevention and management strategies in ROP
 - 5.4.4. Clinical cases and experiences in ROP
- 5.5. Hereditary retinal disorders I
 - 5.5.1. Retinitis pigmentosa: diagnosis and classification
 - 5.5.2. Genetic approach in hereditary retinal disorders
 - 5.5.3. Therapies and treatments in retinitis pigmentosa
 - 5.5.4. Research and advances in gene therapies
- 5.6. Hereditary Retinal Disorders II
 - 5.6.1. Cone and rod dystrophies: diagnosis and management
 - 5.6.2. Atrophy of the retinal pigment epithelium (AERP)
 - 5.6.3. Therapies and treatments in hereditary retinal dystrophies
 - 5.6.4. Comprehensive approach to patients with hereditary retinal disorders
- 5.7. Hereditary Retinal Disorders III
 - 5.7.1. Choroideremia: diagnosis and therapeutic approach
 - 5.7.2. Usher syndrome and other rare diseases
 - 5.7.3. Quality of life and psychological support in patients with hereditary retinal disorders
 - 5.7.4. Clinical cases and research advances
- 5.8. Retinal vascular anomalies
 - 5.8.1. Retinal hemangiomas and telangiectasias
 - 5.8.2. Retinal vascular malformations
 - 5.8.3. Diagnosis and treatment of vascular anomalies
 - 5.8.4. Visual outcome and prognosis in patients with vascular anomalies

- 5.9. Acquired disorders
 - 5.9.1. Ocular trauma in childhood
 - 5.9.2. Inflammation and infection of the retina in children
 - 5.9.3. Pediatric age-related macular degeneration
 - 5.9.4. Other acquired retinal pathologies in children
- 5.10. Retinal detachment in the pediatric age group
 - 5.10.1. Causes and risk factors in pediatric retinal detachment
 - 5.10.2. Clinical evaluation and diagnosis
 - 5.10.3. Medical and surgical treatments in retinal detachment
 - 5.10.4. Outcomes and follow-up in pediatric patients with retinal detachment

Module 6. Childhood Strabismus

- 6.1. Introduction to strabismus
 - 6.1.1. Definition and basic concepts in strabismus
 - 6.1.2. Importance of strabismus in childhood
 - 6.1.3. Initial evaluation in patients with strabismus
 - 6.1.4. Multidisciplinary approach in pediatric strabismus
- 6.2. Endotropias
 - 6.2.1. Classification and types of endotropias
 - 6.2.2. Etiology and Risk Factors
 - 6.2.3. Diagnosis and examination in endotropias
 - 6.2.4. Medical and surgical treatments in endotropias
- 6.3. Exotropia
 - 6.3.1. Characteristics and classification of exotropia
 - 6.3.2. Diagnosis and evaluation in exotropias
 - 6.3.3. Therapeutic management in exotropia
 - 6.3.4. Visual and functional results in exotropia
- 6.4. Vertical strabismus
 - 6.4.1. Types and classification of vertical strabismus
 - 6.4.2. Evaluation and diagnosis in vertical strabismus
 - 6.4.3. Treatments in vertical strabismus
 - 6.4.4. Approach in complex strabismus
- 6.5. Alphabetic patterns
 - 6.5.1. Alphabetic strabismus patterns: A, V, X, Y, among others
 - 6.5.2. Interpretation and diagnosis of alphabetic patterns
 - 6.5.3. Specific treatments in alphabetic patterns
 - 6.5.4. Clinical cases and examples of alphabetic patterns
- 6.6. Congenital cranial congenital disinervative disorders
 - 6.6.1. Oculomotor paresis and oculomotor palsies in infancy
 - 6.6.2. Differential diagnosis in disinervative disorders
 - 6.6.3. Therapeutic management and rehabilitation in disinervative disorders
 - 6.6.4. Follow-up and outcomes in patients with desinervational disorders
- 6.7. Oculomotor palsies
 - 6.7.1. Third cranial nerve palsies: assessment and treatment
 - 6.7.2. Fourth cranial nerve palsy: diagnosis and therapeutic approach
 - 6.7.3. Sixth cranial nerve palsy: management and outcome
 - 6.7.4. Complications and sequelae in oculomotor palsies
- 6.8. Non-surgical treatment of strabismus
 - 6.8.1. Occlusion therapy in strabismus
 - 6.8.2. Prism therapy and visual exercises
 - 6.8.3. Orthoptic therapy and visual stimulation
 - 6.8.4. Indications and results in non-surgical treatment
- 6.9. Surgical Management
 - 6.9.1. Strabismus surgery: techniques and procedures
 - 6.9.2. Preoperative planning in strabismus surgery
 - 6.9.3. Intraoperative and postoperative complications
 - 6.9.4. Results and follow-up in strabismus surgery
- 6.10. Strabismus surgery complications
 - 6.10.1. Common complications in strabismus surgery
 - 6.10.2. Management of Care Complications
 - 6.10.3. Long-term complications and their management
 - 6.10.4. Prevention strategies in strabismus surgery complications

Module 7. Pediatric Neuro-Ophthalmology

- 7.1. Nystagmus
 - 7.1.1. Definition and classification of nystagmus
 - 7.1.2. Etiology and diagnosis of nystagmus
 - 7.1.3. Congenital nystagmus: characteristics and diagnosis
 - 7.1.4. Acquired nystagmus in childhood
- 7.2. Nystagmus II
 - 7.2.1. Therapeutic approach and management of nystagmus
 - 7.2.2. Nystagmus case studies and examples
 - 7.2.3. Advanced therapies and treatments in nystagmus
 - 7.2.4. Visual outcomes and prognosis in infantile nystagmus
- 7.3. Supranuclear and Internuclear Motility Disorders
 - 7.3.1. Supranuclear ocular motility disorders
 - 7.3.2. Internuclear ocular motility disorders
 - 7.3.3. Evaluation and diagnosis in supranuclear and internuclear disorders
 - 7.3.4. Management and treatment of ocular motility disorders
- 7.4. Congenital Optic Nerve Anomalies
 - 7.4.1. Structural abnormalities of the optic nerve
 - 7.4.2. Diagnosis and classification of congenital anomalies
 - 7.4.3. Visual implications and outcomes in patients with optic nerve anomalies
 - 7.4.4. Clinical cases and examples of congenital anomalies
- 7.5. Hereditary Optic Neuropathies
 - 7.5.1. Leber Hereditary Optic Neuropathy (LHON)
 - 7.5.2. Other hereditary optic neuropathies
 - 7.5.3. Genetic studies and diagnosis in optic neuropathies
 - 7.5.4. Therapies and treatments in hereditary optic neuropathies
- 7.6. Optic Atrophy in the Child
 - 7.6.1. Causes and risk factors in infantile optic atrophy
 - 7.6.2. Evaluation and diagnosis of optic atrophy in children
 - 7.6.3. Management and treatment of optic atrophy in infancy
 - 7.6.4. Visual outcomes and follow-up in pediatric optic atrophy

- 7.7. Pediatric Optic Neuritis
 - 7.7.1. Optic neuritis in children: etiology and characteristics
 - 7.7.2. Diagnosis and evaluation in pediatric optic neuritis
 - 7.7.3. Therapies and treatment in pediatric optic neuritis
 - 7.7.4. Prognosis and follow-up in optic neuritis
- 7.8. Pseudopapilledema. Optic nerve drusen
 - 7.8.1. Pseudopapilledema in infancy
 - 7.8.2. Optic nerve drusen: diagnosis and classification
 - 7.8.3. Management and follow-up in pseudopapilledema and drusen
 - 7.8.4. Clinical cases and examples of pseudopapilledema
- 7.9. Papillary edema, intracranial hypertension
 - 7.9.1. Papillary edema in children: causes and diagnosis
 - 7.9.2. Intracranial hypertension in infancy
 - 7.9.3. Treatment and management in papillary edema and intracranial hypertension
 - 7.9.4. Visual findings and follow-up in patients with these conditions
- 7.10. Pupillary Anomalies
 - 7.10.1. Pupillary abnormalities in infancy
 - 7.10.2. Diagnosis and evaluation of pupillary abnormalities
 - 7.10.3. Treatments and management of pupillary abnormalities
 - 7.10.4. Clinical cases and examples of pupillary anomalies

Module 8. Functional Aspects of Vision or Other Associated Disorders

- 8.1. Child with Low Vision
 - 8.1.1. Evaluation and diagnosis of low vision in children
 - 8.1.2. Multidisciplinary approach to children with low vision
 - 8.1.3. Visual aids and assistive devices
 - 8.1.4. Rehabilitation and therapy in children with low vision
- 8.2. Cerebral visual impairment I
 - 8.2.1. Characteristics and diagnosis of cerebral visual impairment (CVI)
 - 8.2.2. Etiology and risk factors in CVI
 - 8.2.3. Therapies and treatments in CVI
 - 8.2.4. Outcomes and prognosis in children with CVI

- 8.3. Cerebral visual impairment II
 - 8.3.1. Functional and cognitive assessment in CVI
 - 8.3.2. Educational intervention and support in CVI
 - 8.3.3. Clinical cases and examples of CVI
 - 8.3.4. Research and advances in cerebral visual impairment
- 8.4. Visual maturational delay
 - 8.4.1. Evaluation and diagnosis of visual maturational delay
 - 8.4.2. Early intervention and visual stimulation
 - 8.4.3. Therapeutic approach in children with visual maturational delay
 - 8.4.4. Outcomes and follow-up in visual maturational delay
- 8.5. Prematurity syndrome
 - 8.5.1. Retinopathy of prematurity: diagnosis and classification
 - 8.5.2. Treatment and follow-up in retinopathy of prematurity
 - 8.5.3. Visual complications in premature infants
 - 8.5.4. Prevention and care in prematurity syndrome
- 8.6. Infantile cerebral palsy
 - 8.6.1. Classification and types of infantile cerebral palsy (ICP)
 - 8.6.2. Functional assessment and diagnosis in CP
 - 8.6.3. Therapeutic approach in CP
 - 8.6.4. Specific therapies and treatments in PCI
- 8.7. Infantile cerebral palsy and vision
 - 8.7.1. Complications and visual problems in CPI
 - 8.7.2. Neuropsychological aspects in children with CPI
 - 8.7.3. Quality of life and support in ICH
 - 8.7.4. Clinical cases and experiences in PCI
- 8.8. Addressing common problems in children with visual impairment
 - 8.8.1. Learning and developmental problems in children with visual impairment
 - 8.8.2. Communication and social skills in children with visual impairment
 - 8.8.3. Educational and social inclusion in children with visual impairment
 - 8.8.4. Strategies and resources for families of children with visual impairment
- 8.9. Simulation in the child
 - 8.9.1. Simulation of visual impairment in children
 - 8.9.2. Benefits and limitations of simulation
 - 8.9.3. Sensitization and empathy towards children with visual impairment
 - 8.9.4. Simulation tools and techniques

- 8.10. Dyslexia, crossed laterality and other disorders
 - 8.10.1. Dyslexia in children: diagnosis and approach
 - 8.10.2. Cross laterality in childhood
 - 8.10.3. Other learning and developmental disorders in children
 - 8.10.4. Educational strategies and support in dyslexia and related disorders

Module 9. Ophthalmologic Manifestations of Childhood Systemic Pathology

- 9.1. Phakomatosis
 - 9.1.1. Phakomatosis: definition and classification
 - 9.1.2. Syndromes and disorders related to Phakomatosis
 - 9.1.3. Evaluation and diagnosis in children with Phakomatosis
 - 9.1.4. Treatments and therapeutic approach in Phakomatosis
- 9.2. Neurofibromatosis
 - 9.2.1. Neurofibromatosis type 1 (NF1): characteristics and diagnosis
 - 9.2.2. Neurofibromatosis type 2 (NF2): evaluation and management
 - 9.2.3. Other forms of neurofibromatosis
 - 9.2.4. Clinical cases and examples of neurofibromatosis in children
- 9.3. Pediatric tumor pathology I. Snc
 - 9.3.1. Brain tumors in children: types and classification
 - 9.3.2. Diagnosis and evaluation of tumors of the central nervous system (CNS)
 - 9.3.3. Treatments and surgery in pediatric brain tumors
 - 9.3.4. Follow-up and prognosis in pediatric CNS tumors
- 9.4. Pediatric tumor pathology 2: leukemia, neuroblastoma
 - 9.4.1. Leukemia in children: diagnosis and classification
 - 9.4.2. Neuroblastoma in childhood: etiology and characteristics
 - 9.4.3. Treatments and therapies in pediatric leukemia and neuroblastoma
 - 9.4.4. Outcomes and prognosis in pediatric leukemia and neuroblastoma
- 9.5. Mitochondrial pathology
 - 9.5.1. Mitochondrial disorders in childhood
 - 9.5.2. Diagnosis and evaluation of mitochondrial pathology
 - 9.5.3. Treatments and therapeutic approach in mitochondrial disorders
 - 9.5.4. Research and advances in mitochondrial pathology

- 9.6. Neurometabolic disorders
 - 9.6.1. Neurometabolic disorders in children: classification
 - 9.6.2. Evaluation and diagnosis of neurometabolic disorders
 - 9.6.3. Therapies and treatments in pediatric neurometabolic disorders
 - 9.6.4. Outcomes and follow-up in neurometabolic disorders
- 9.7. Intrauterine disorders and perinatal infection
 - 9.7.1. Intrauterine disorders of ocular development
 - 9.7.2. Perinatal infection and its impact on vision
 - 9.7.3. Diagnosis and management of intrauterine disorders and perinatal infection
 - 9.7.4. Complications and prognosis in cases of intrauterine disorders and perinatal infection
- 9.8. Other systemic pathologies: albinism, Marfan syndrome, etc
 - 9.8.1. Albinism in children: characteristics and diagnosis
 - 9.8.2. Marfan's syndrome and other systemic disorders
 - 9.8.3. Ophthalmologic evaluation and care in cases of systemic pathologies
 - 9.8.4. Multidisciplinary approach in patients with systemic pathologies
- 9.9. Pediatric ocular trauma
 - 9.9.1. Types and causes of ocular trauma in children
 - 9.9.2. Evaluation and diagnosis of pediatric ocular trauma
 - 9.9.3. Treatments and management of ocular trauma
 - 9.9.4. Outcomes and follow-up in pediatric ocular trauma cases
- 9.10. Battered child syndrome
 - 9.10.1. Identification and assessment of the battered child syndrome
 - 9.10.2. Intervention and support in child maltreatment cases
 - 9.10.3. Legal and ethical aspects of maltreated child syndrome
 - 9.10.4. Clinical cases and experiences in battered child syndrome

Module 10. Practical Management of Special Situations in Pediatric Ophthalmology

- 10.1. Children Who Does Not See
 - 10.1.1. Causes of visual impairment in children
 - 10.1.2. Clinical history and evaluation in the child who does not see
 - 10.1.3. Diagnosis and approach in cases of visual impairment in childhood
 - 10.1.4. Communication and support strategies in children with visual impairment

- 10.2. Neonate with conjunctivitis
 - 10.2.1. Neonatal conjunctivitis: causes and diagnosis
 - 10.2.2. Therapeutic approach in neonates with conjunctivitis
 - 10.2.3. Complications and prognosis in neonatal conjunctivitis
 - 10.2.4. Clinical cases and examples of conjunctivitis in neonates
- 10.3. JIA: how to deal with it
 - 10.3.1. Juvenile idiopathic arthritis (JIA): classification and subtypes
 - 10.3.2. Ocular manifestations in JIA
 - 10.3.3. Diagnosis and evaluation of ocular JIA
 - 10.3.4. Treatments and therapies in cases of ocular JIA
- 10.4. Epiphora despite probing
 - 10.4.1. Epiphora in children: causes and evaluation
 - 10.4.2. Nasolacrimal probing in pediatric epiphora
 - 10.4.3. Alternative treatments in persistent epiphora
 - 10.4.4. Results and follow-up in epiphora in spite of probing
- 10.5. Acute strabismus in the child
 - 10.5.1. Acute strabismus in children: causes and diagnosis
 - 10.5.2. Evaluation and early approach in acute strabismus
 - 10.5.3. Treatments and surgery in cases of acute strabismus
 - 10.5.4. Outcome and prognosis in acute strabismus in childhood
- 10.6. ROP: what I see and how I treat it
 - 10.6.1. Retinopathy of prematurity (ROP): stages and classification
 - 10.6.2. Diagnosis and evaluation in ROP
 - 10.6.3. Treatments and follow-up in ROP
 - 10.6.4. Clinical cases and examples of ROP in premature infants
- 10.7. Papillary effacement
 - 10.7.1. Papillary effacement in children: causes and diagnosis
 - 10.7.2. Ophthalmologic evaluation in cases of papillary effacement
 - 10.7.3. Treatments and management in papillary effacement
 - 10.7.4. Outcomes and follow-up in children with papillary effacement

- 10.8. Practical approach to pediatric anisocoria
 - 10.8.1. Anisocoria in childhood: causes and classification
 - 10.8.2. Evaluation and diagnosis of pediatric anisocoria
 - 10.8.3. Approach and practical management of anisocoria in children
 - 10.8.4. Clinical cases and examples of pediatric anisocoria
- 10.9. Papillary pallor: practical approach
 - 10.9.1. Papillary pallor in children: causes and diagnosis
 - 10.9.2. Evaluation and studies in cases of papillary pallor
 - 10.9.3. Treatment and follow-up in children with papillary pallor
 - 10.9.4. Clinical cases and examples of papillary pallor
- 10.10. Strange ocular movements in the child
 - 10.10.1. Types and characteristics of ocular twitching in infancy
 - 10.10.2. Diagnosis and evaluation in cases of atypical eye movements
 - 10.10.3. Therapeutic approach and management in unusual eye movements
 - 10.10.4. Outcome and prognosis in children with atypical eye movements

“ Access to first class teaching materials, carefully elaborated to guarantee a deep and precise understanding of all the topics covered”



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.



“

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.





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 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.



07

Certificate

The Professional Master's Degree in Pediatric Ophthalmology guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree 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”

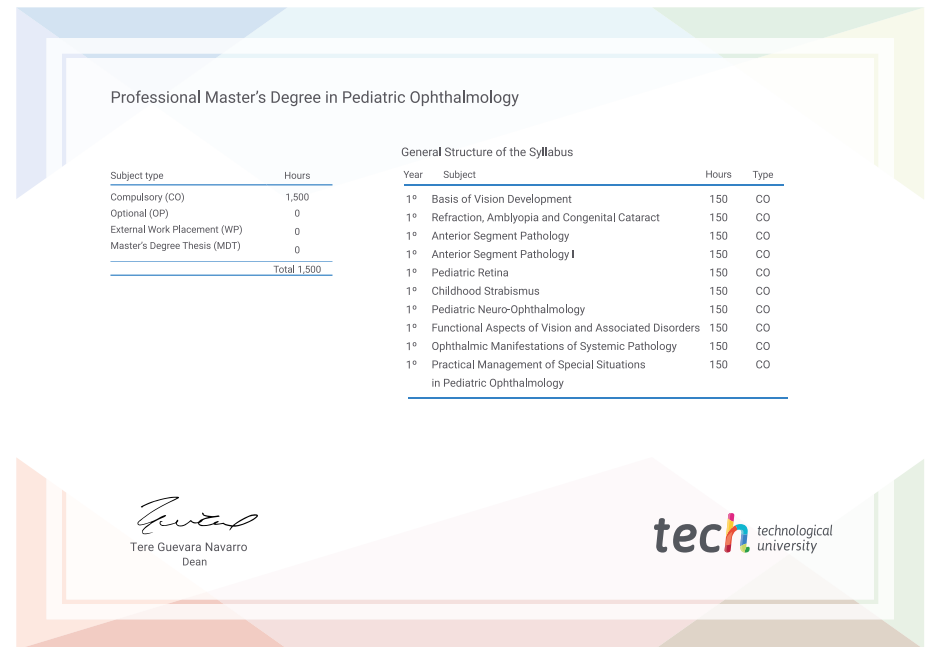
This **Professional Master's Degree in Pediatric Ophthalmology** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** 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 Pediatric Ophthalmology

Official N° of Hours: 1,500 h.



*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.



Professional Master's Degree Pediatric Ophthalmology

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Professional Master's Degree

Pediatric Ophthalmology

