

# Internship Program Neuro-Ophthalmology



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Internship Program  
Neuro-Ophthalmology

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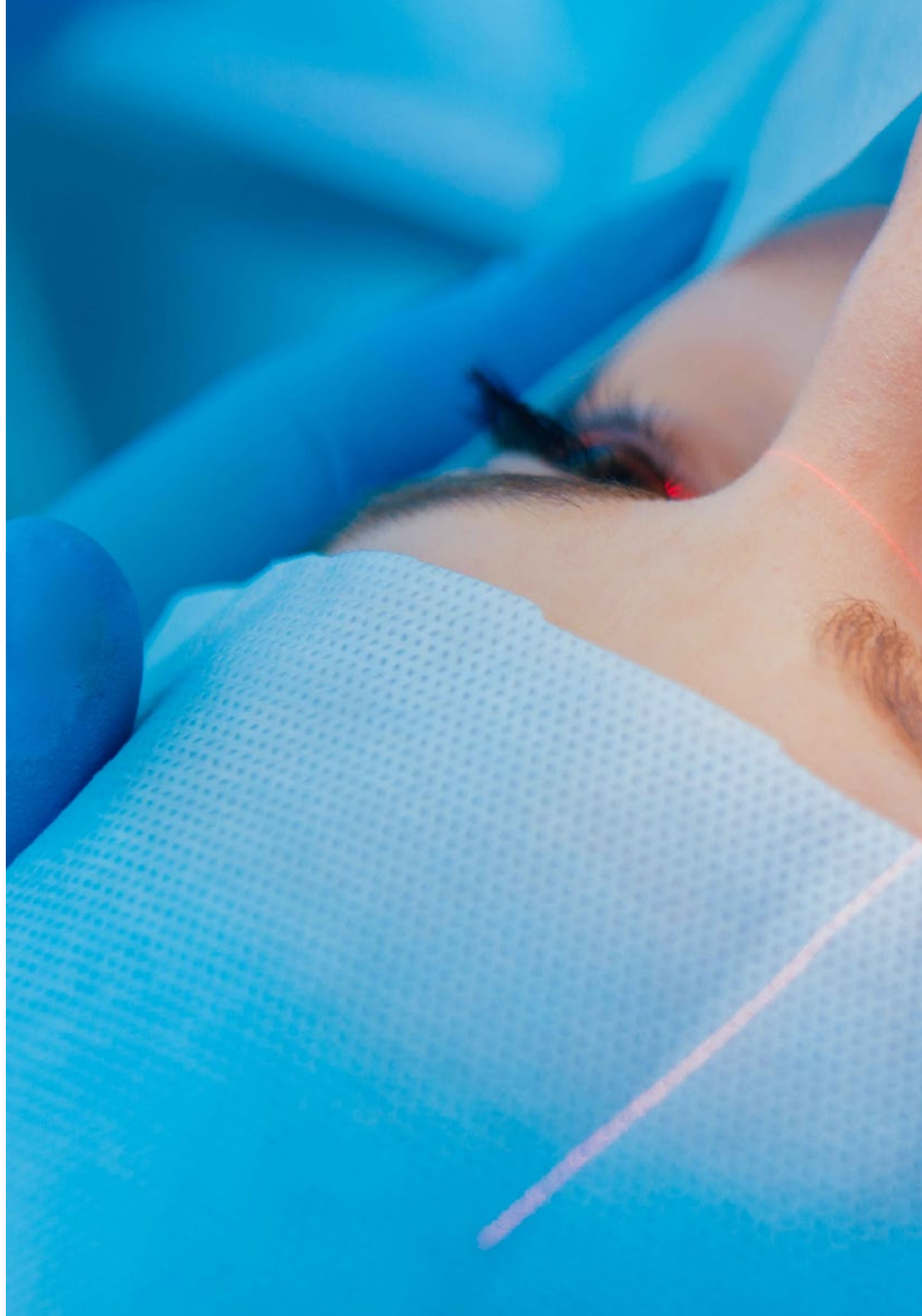
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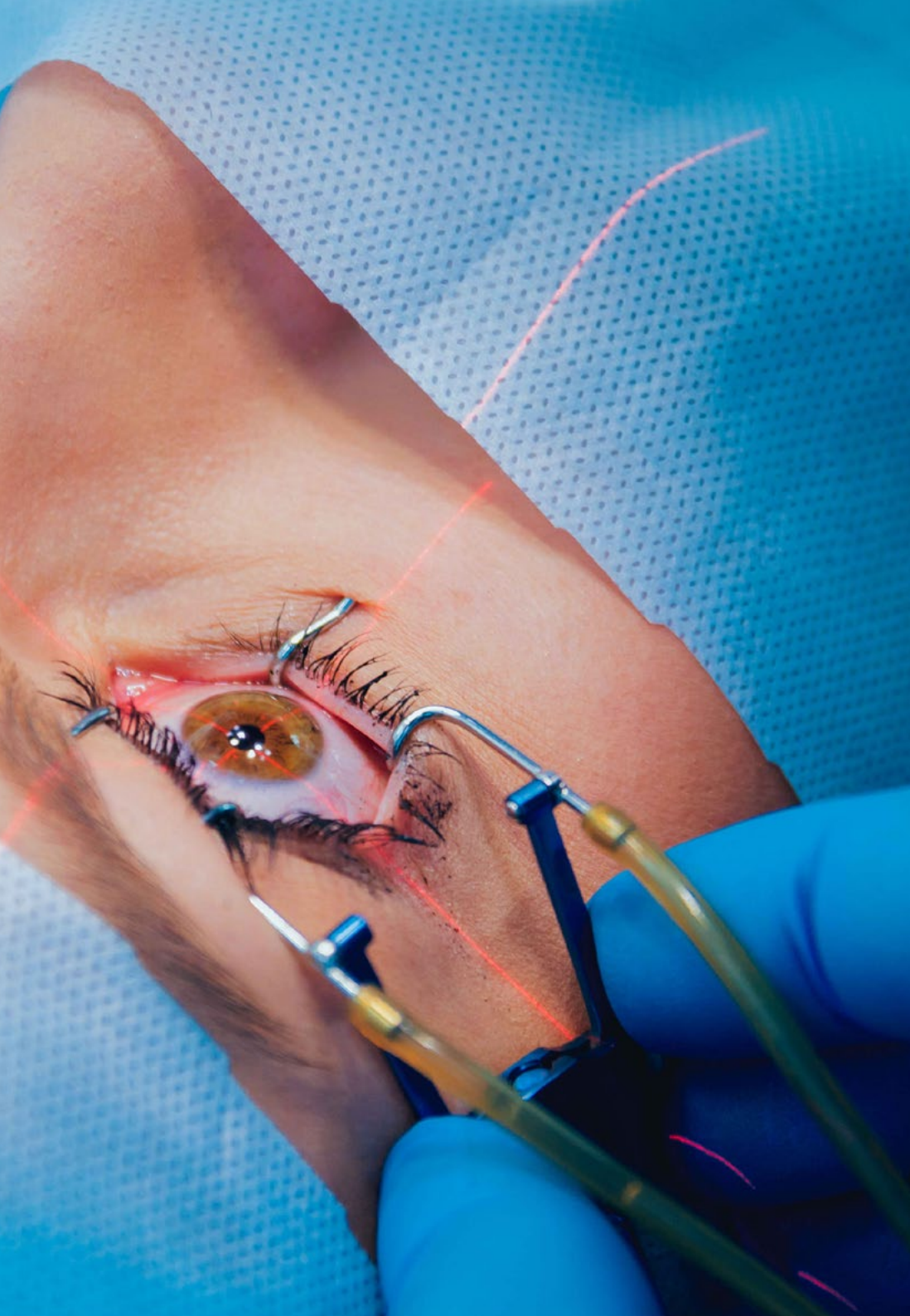
# 01 Introduction

The recent development of Neuro-Ophthalmology has led to the appearance of new surgical and clinical trends and technological tools for diagnosing and treating the pathologies studied by this medical discipline. However, it is not easy for physicians to keep up-to-date with all these innovations. For this reason, this study program offers a complete update on these topics, in a 100% face-to-face and practical study modality. Therefore, the specialist must complete 3 weeks of internship in a renowned hospital institution in the health field in question, applying the most advanced procedures. In addition, they will be under the guidance of renowned experts at all times, who will test the development of their skills through direct attention to real cases.



*In a 100% practical and on-site format, this program will bring you up-to-date on the new clinical and surgical trends in Neuro-Ophthalmology, acquiring the highest level of experience under the guidance of leading experts”*





Scientific and technological research in Neuro-Ophthalmology has led to the appearance of multiple innovations from the clinical and surgical point of view, as well as the development of specific devices to assist patients with neuro-visual pathologies. A clear example of this is the evolution of diagnostic tools, such as Optical Coherence Tomography, or the development of transpupillary Thermotherapy against tumors such as Retinoblastomas. All these advances, although beneficial for human health, represent a great challenge for the specialist who must remain up-to-date in a context where there are not many programs focused on the subject matter or with a high theoretical load.

As a solution to this challenge, TECH has designed this Internship Program, the only one of its kind, which allows the physician access to a renowned hospital center. From there, you will have the opportunity to develop the most cutting-edge skills in Neuro-Ophthalmology, implementing the most current techniques and handling the most modern tools on the market. They will also have the opportunity to choose the entity that best suits their geographical location to complete this educational process.

The internship, which is 100% on-site, intensive and immersive, will last 3 weeks. Throughout this period, the medical professional will be assisted by an attending tutor, who will accompany them in the development of new skills and expand the knowledge that they will be able to incorporate holistically in their daily practice. In addition, they will interact at all times with other experts, with extensive experience and prestige, based on their advanced experiences in terms of the latest developments in the discipline in question.

# 02

## Why Study an Internship Program?

Research in neuro-ophthalmology is constantly evolving and new procedures and techniques, as well as technological innovations, are emerging at the same time. For this reason, hospital centers require more and more qualified professionals, with a deep knowledge of the latest developments in this field. With this Internship Program of TECH, the physician will be able to get up-to-date in a direct and immersive way through a face-to-face, practical and exhaustive stay. This rigorous internship will allow the application of the most modern clinical strategies on real patients under the supervision of leading experts in the field.



*TECH puts at your disposal the latest developments in the field of Neuro-Ophthalmology so that you can implement them with optimum quality in your daily professional practice"*

### 1. Updating from the latest technology available

The most recent surgical technologies and clinical methodologies in the field of Neuro-Ophthalmology are addressed in this TECH program. In this way, the specialist will be able to develop different competencies for the efficient management of these tools and procedures of vital importance for the holistic care of patients with a wide range of pathologies.

### 2. Gaining In-Depth Knowledge from the Experience of Top Specialists

During this Internship Program, the physician will work and learn under the guidance of great experts in Neuro-Ophthalmology. At the same time, they will have the support of an assistant tutor, who will be in charge of involving them in the specific care dynamics of this health discipline and will assign them tasks of varying complexity in order to expand their skills.

### 3. Entering First-Class Clinical Environments

For this qualification, TECH has selected healthcare institutions of the highest level. The centers selected for this intensive internship have the most up-to-date technology available at the moment. In addition, all the experts on their staffs are trained to offer the best scientific and technological advice to the neuro-ophthalmologist.



#### **4. Putting the acquired knowledge into daily practice from the very first moment**

This Internship Program stands out from other educational programs in the market because of its emphasis on the assimilation of skills and the use of complex technologies from day one. Therefore, this 100% practical program will provide the physician with a specific vision of the complexities that they may face in the daily practice of the most modern Neuro-Ophthalmology.

#### **5. Expanding the Boundaries of Knowledge**

TECH is the largest online educational institution in the educational market. Therefore, through its network of contacts and collaborations, it has established alliances with institutions located in different latitudes. In this way, the specialist will be able to choose between different centers, from distant geographical locations, to complete this first-class practical experience.



*You will have full practical immersion at the center of your choice"*

# 03

## Objectives

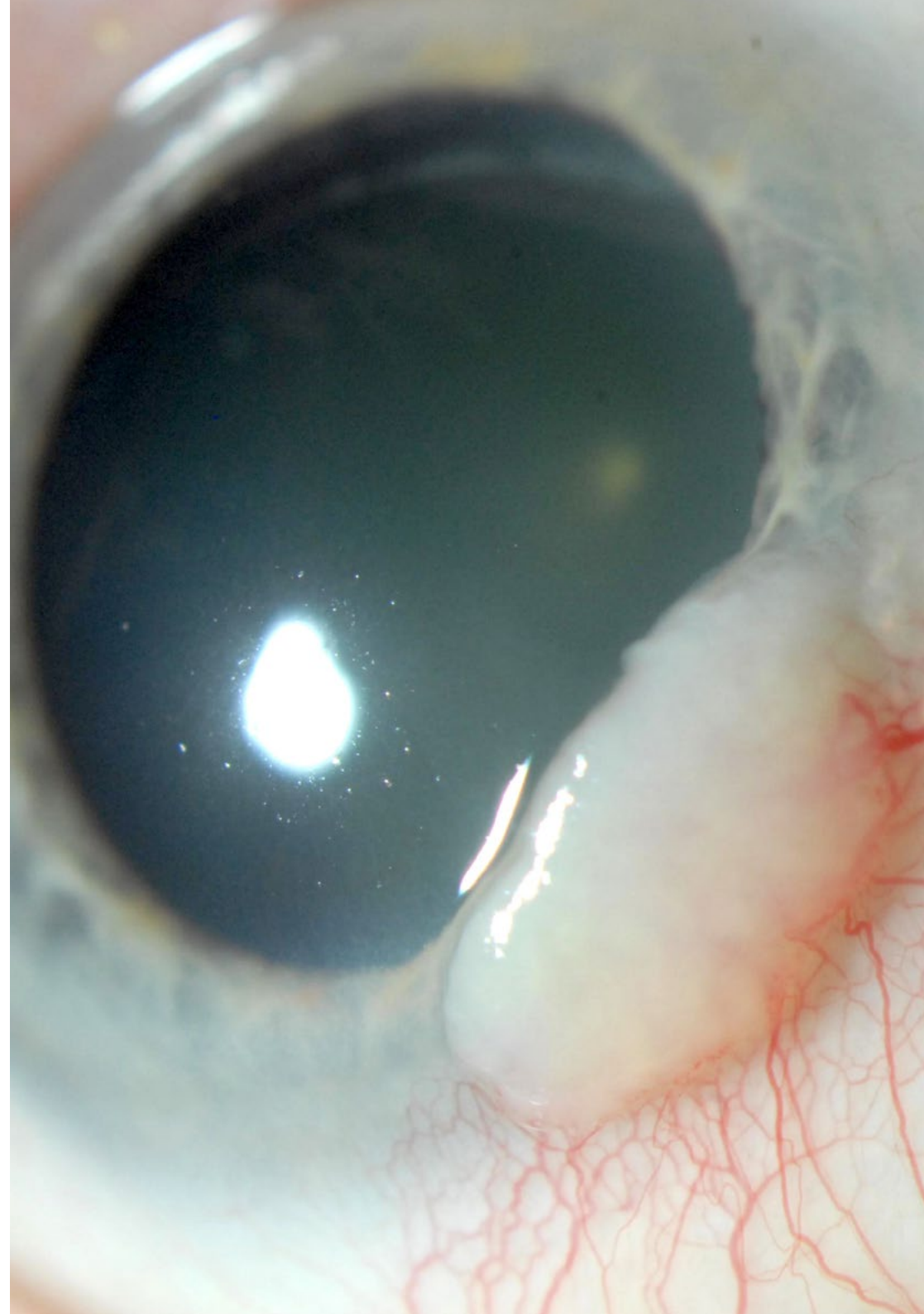
This Internship Program in Neuro-Ophthalmology will update the physician on the latest diagnostic and therapeutic procedures in relation to visual pathologies. In particular, they will be up-to-date on highly effective technological tools that can prevent tumor and vascular disorders, among others.



### General Objectives

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- Delve into the anatomical and physiological knowledge necessary to understand the pathologies that will be developed in the following modules
- Train the student for the identification and treatment of Neuro-Ophthalmological pathologies with supranuclear origin
- Delve into vascular pathologies, both obstructive, inflammatory, malformative and tumor optic pathway
- Perform a correct diagnostic strategy, through the appropriate selection of clinical tests, based on the symptoms reported by the patient







## Specific Objectives

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- ♦ Delve into its current situation and the future lines of knowledge that open in this field from now on
- ♦ Promote the acquisition of the necessary skills for the examination of the neuro-ophthalmologic patient
- ♦ Develop the possibilities offered by diagnostic tests currently available
- ♦ Delve into the bone, vascular and muscular anatomy that may be involved in the different neuro-ophthalmological pathologies
- ♦ Describe the anatomical particularities of the visual pathway and its involvement in image perception
- ♦ Perform a diagnostic and therapeutic approach to the different hyperkinetic facial disorders that may occur
- ♦ Facilitate in-depth knowledge of myopathies with ophthalmological repercussions
- ♦ Learn oculomotor alterations originating in the brain stem from an anatomical and pathophysiological point of view
- ♦ Know the cerebellar and vestibular origin alterations that produce Neuro-Ophthalmological alterations
- ♦ Develop the ophthalmological repercussions of certain complex neurological diseases such as facomatosis, Parkinson's disease, etc
- ♦ Classify the different types of nystagmus and other oscillatory eye movements
- ♦ Manage the concepts of pupillary anisocoria and reactivity and associated neurological pathologies
- ♦ Develop pathologies of vascular, inflammatory, infiltrative and metabolic origin of the optic nerve
- ♦ Approach the visual impact of traumatic optic nerve damage
- ♦ List the Neuro-Ophthalmological alterations described so far in COVID patients
- ♦ Train the student for a correct diagnostic and therapeutic approach to headaches with ocular origin or symptomatology
- ♦ Assess different vascular alterations with visual impairment
- ♦ Master the etiology, clinical and treatment of intracranial hypertension
- ♦ Examine the visual repercussion of different neoplasms of the visual pathway
- ♦ Define specific concepts of visual development with impact on ocular motility
- ♦ Apply the clinic and treatment of alterations of ocular statics and mobility, both horizontal and vertical or compound
- ♦ Assess both surgical and non-surgical treatment options
- ♦ Delve into normal and abnormal visual development with specific neuro-ophthalmologic examination techniques for the pediatric patient
- ♦ Identify the possible anatomical or functional developmental alterations that may be found in pediatric patients
- ♦ Know the optic nerve pathologies that may occur in childhood

# 04 Educational Plan

Through an intensive program, with a duration of 3 weeks, the physician will work and collaborate with great experts in Neuro-Ophthalmology. All of them will have access to a first-class internship, from Monday to Friday, in 8-hour shifts. In this way, they will be able to handle the most complex equipment, develop parallel surgical techniques and generally master the internal dynamics of the care units for neurological problems that have an impact on sight.

In this completely practical Internship Program, the activities are aimed at developing and perfecting the skills necessary to provide healthcare care in areas and conditions that require highly qualified professionals, and are oriented towards specific expertise for practicing the activity, in a safe environment for the patient and with highly professional performance.

During the internship program, the specialist will be guided by an assistant tutor, who has been appointed to advise the academic preparation and complement the professional practice of TECH graduates.

The student will actively participate by performing activities and procedures related to each area of competence (learning to learn and learning to do), with the support and guidance of the teachers and other classmates to facilitate teamwork and multidisciplinary integration as transversal competencies for the practice of medicine (learning to be and learning to relate to others).





The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

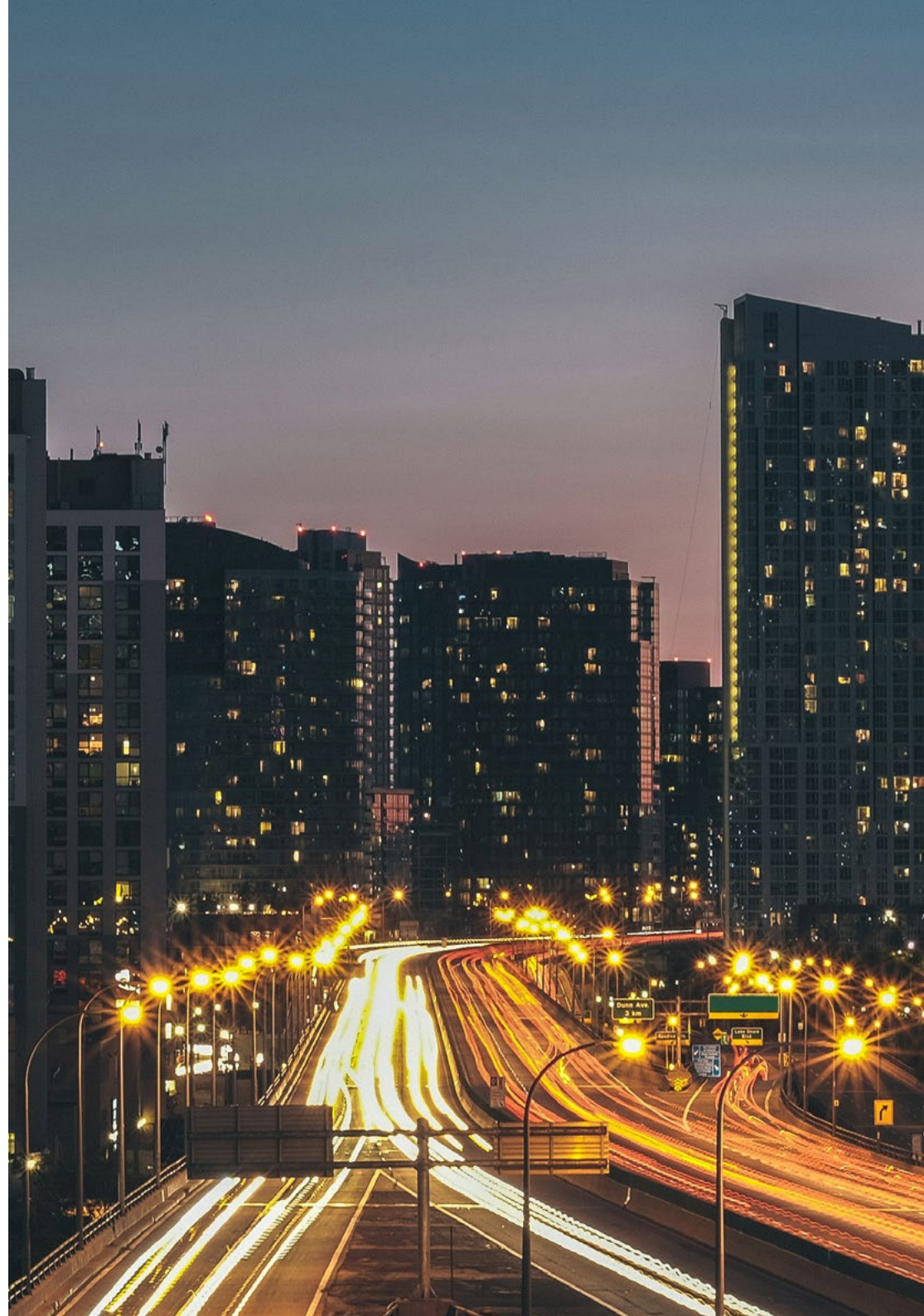
Module	Practical Activity
<b>Latest Diagnostic Tools in Neuro-Ophthalmology</b>	Implement Optical Coherence Tomography to assess the state of the macula and the ocular retina
	Diagnose ocular tumors using Cranial Magnetic Resonance Imaging
	Assess the state of the ocular nerves through Electronystagmography tools
	Study strabismus through specific ocular motility tests
	Identify pathologies such as Nystagmus with videooculography
<b>Treatment of Vascular and Tumor Pathologies of the Ocular Anatomy</b>	Use of transpupillary thermotherapy or laser therapy against Retinoblastoma
	Perform Enucleation in eyes severely damaged by Melanomas in the ocular choroids
	Apply external beam radiation therapy and localized radiation therapy to shrink malignant tumors in the eye
	Administer chemotherapeutics directly into the tumor formation from a catheter-facilitated injection
	Remove hemangiomas located in eyelids, retina and orbit by microsurgery
<b>Pediatric Neuro-Ophthalmology</b>	Perform complete eye examinations to the pediatric patient
	Know and implement the latest medical procedures in Ophthalmopediatrics to ensure the best care for children with ocular pathology
	Identify the differential diagnosis of optic neuropathies in childhood
<b>Approach to Strabismus in Early Childhood</b>	Develop the differential diagnosis between strabismus and neurological disorder
	Implement the Bangerter Filter in the lens of the stronger eye of the child with strabismic amblyopia
	Correct Accommodative Endotropia through the use of glasses or contact lenses
	Improve the asymmetry of the palpebral aperture, generated by the Duane Syndrome, by means of ophthalmologic surgery
	Implement refractive and orthoptic against strabismic pathologies

# 05 Where Can I Do the Internship Program?

With the premise of offering a cutting-edge and quality education, TECH offers health professionals an unparalleled academic opportunity. Professionals interested in expanding their skills in Neuro-Ophthalmology will be able to access first-class health institutions, located in different geographical latitudes. From these centers, they will have access to innovative technologies and will be able to apply the most up-to-date surgical protocols of the moment, under the supervision and guidance of leading experts.



*You will assist, through this program, patients with real neuro-ophthalmologic pathologies in a hospital institution of international prestige”*





The student will be able to do this program at the following centers:



Medicine

### Hospital HM Modelo

Country	City
Spain	La Coruña

Address: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

### Hospital HM Rosaleda

Country	City
Spain	La Coruña

Address: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Hair Transplantation
- Orthodontics and Dentofacial Orthopedics



Medicine

### Hospital HM San Francisco

Country	City
Spain	León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Update in Anesthesiology and Resuscitation
- Trauma Nursing



Medicine

### Hospital HM Regla

Country	City
Spain	León

Address: Calle Cardenal Landázuri, 2, 24003, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Update on Psychiatric Treatment in Minor Patients



Medicine

### Hospital HM Madrid

Country	City
Spain	Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Palliative Care
- Anaesthesiology and Resuscitation



Medicine

### Hospital HM Montepríncipe

Country	City
Spain	Madrid

Address: Av. de Montepríncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Palliative Care
- Aesthetic Medicine



Medicine

### Hospital HM Torrelodones

Country	City
Spain	Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

### Hospital HM Nuevo Belén

Country	City
Spain	Madrid

Address: Calle José Silva, 7, 28043, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- General and Digestive System Surgery
- Clinical Nutrition in Medicine



Medicine

### Hospital HM Puerta del Sur

Country: Spain City: Madrid

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Palliative Care  
- Clinical Ophthalmology



Medicine

### Hospital HM Vallés

Country: Spain City: Madrid

Address: Calle Santiago, 14, 28801, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Gynecologic Oncology  
- Clinical Ophthalmology



Medicine

### HM CINAC - Centro Integral de Neurociencias

Country: Spain City: Madrid

Address: Avenida Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Neurological Physiotherapy



Medicine

### HM CINAC Barcelona

Country: Spain City: Barcelona

Address: Avenida de Vallcarca, 151, 08023, Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Neurodegenerative Diseases  
- Neurology Nursing



Medicine

### Policlínico HM Arapiles

Country: Spain City: Madrid

Address: C. de Arapiles, 8, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Anaesthesiology and Resuscitation  
- Pediatric Dentistry



Medicine

### Policlínico HM Cruz Verde

Country: Spain City: Madrid

Address: Plaza de la Cruz Verde, 1-3, 28807, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Advanced Clinical Podiatry  
- Optical Technologies and Clinical Optometry



Medicine

### Policlínico HM Distrito Telefónica

Country: Spain City: Madrid

Address: Ronda de la Comunicación, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Optical Technologies and Clinical Optometry  
- General and Digestive System Surgery



Medicine

### Policlínico HM Matogrande

Country: Spain City: La Coruña

Address: R. Enrique Mariñas Romero, 32G, 2º, 15009, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**  
- Sports Physiotherapy  
- Neurodegenerative Diseases



Medicine

### **Policlínico HM Rosaleda Lalín**

Country	City
Spain	Pontevedra

Address: Av. Buenos Aires, 102, 36500, Lalín, Pontevedra

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Advances in Hematology and Hemotherapy
- Neurological Physiotherapy



Medicine

### **Policlínico HM Imi Toledo**

Country	City
Spain	Toledo

Address: Av. de Irlanda, 21, 45005, Toledo

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

**Related internship programs:**

- Electrotherapy in Rehabilitation Medicine
- Hair Transplantation

# 06

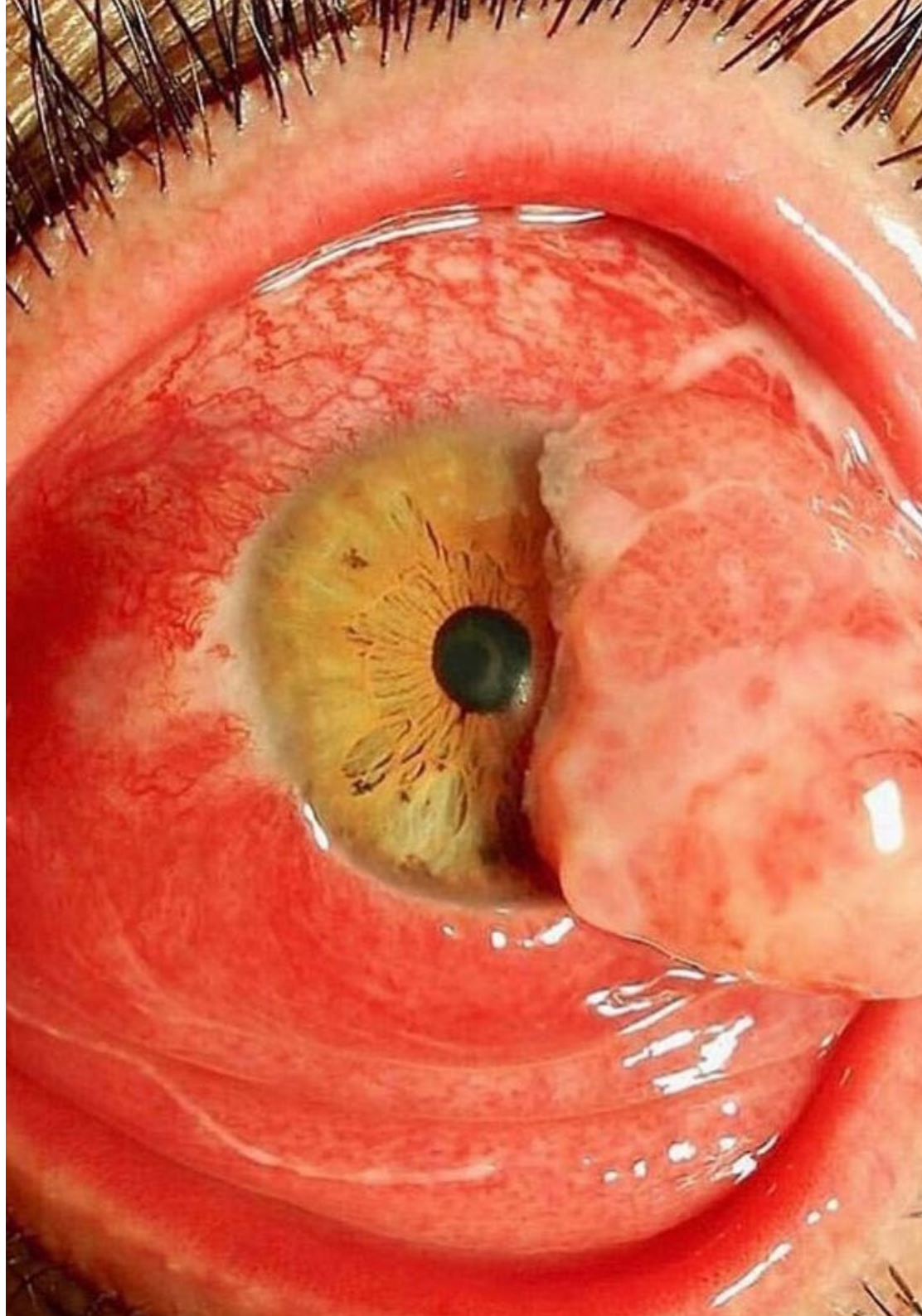
## General Conditions

### Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.





## General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

**1. TUTOR:** During the Internship Program, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor, whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

**2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

**3. ABSENCE:** If the students does not show up on the start date of the Internship Program, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

**4. CERTIFICATION:** Professionals who pass the Internship Program will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** The Internship Program shall not constitute an employment relationship of any kind.

**6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

**7. DOES NOT INCLUDE:** The Internship Program will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

# 07 Certificate

This **Internship Program in Neuro-Ophthalmology** contains the most complete and up-to-date program on the professional and academic scene.

After the student has passed the evaluations, they will receive their corresponding TECH Internship Program issued by TECH Technological University via tracked delivery.

The certificate issued by TECH will reflect the grade obtained in the test.

Title: **Internship Program in Neuro-Ophthalmology**

Duration: **3 weeks**

Course Modality: **Monday to Friday, 8-hour consecutive shifts**

Total Hours: **120 h. of professional practice**



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Internship Program  
Neuro-Ophthalmology

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