

# Postgraduate Certificate Tumor Pathology



## Postgraduate Certificate Tumor Pathology

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

**6 ECTS Credits**

Teaching Hours: **150 hours.**

Website: [www.techtute.com/medicine/postgraduate-certificate/tumor-pathology](http://www.techtute.com/medicine/postgraduate-certificate/tumor-pathology)

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# 01

# Introduction

Specialize in Tumor Pathology with this high-level training provided by professionals with extensive experience in the sector. You will gain an in-depth understanding of the histological and molecular basis of glial tumor classification and the prognostic and therapeutic implications derived from it.





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*A comprehensive program that will help you keep up to date with the latest techniques in Neurosurgery”*

The Postgraduate Certificate in Tumor Pathology is an updated compilation of the pathologies that are subject to study and treatment with Neurosurgery. The application of diagnostic and therapeutic algorithms enhances student learning and synthesizes the flow of information to facilitate its practical application in the student's environment.

The first part of this program will focus on glial tumors and other related tumors, such as tumors of ependymal and neuronal origin. Histological and molecular classification of glial tumors addresses the modifications that have been made in the most recent classifications of brain tumors, incorporating advances in molecular diagnosis to the histological classification that had been used, and how these new classifications impact the prognosis and treatment of glial tumors.

The following topics will address separately the clinical, radiological and prognostic features of both high-grade glial tumors and low-grade glial tumors. Subsequently, the treatment of glial tumors will be discussed in its entirety, with special emphasis on the latest advances that are being implemented in clinical practice. The therapeutic algorithm in the treatment of glial tumors explains in detail the therapeutic strategy using management schemes and clinical cases to exemplify the therapeutic approach and help choose the best treatment in each situation.

The application of new technologies to neurosurgery has helped to optimize the surgical treatment of glial tumors, and *Advances in the Surgical Treatment of Gliomas* details how the latest surgical innovations have contributed to improved survival of patients with this pathology. However, an improvement in survival would be meaningless if it did not also incorporate the preservation of neurological functions and the reduction of permanent sequelae after surgery, dedicating two topics to surgery in awake patients and monitoring in brain glioma surgery, where the surgical procedure and the keys that determine the success of the surgery are precisely detailed.

The change in therapeutic protocols and the innovative technologies that have been emerging have produced an evolution in the treatment with radiotherapy in brain gliomas; on the other hand, the appearance of new lines of oncological treatment has modified the role of chemotherapy in the treatment of glial tumors, contributing to improve the prognosis in this group of patients.

This **Postgraduate Certificate in Tumor Pathology** is the most comprehensive and up-to-date educational program on the market. The most important features include:

- ◆ The development of case studies presented by experts in international cooperation of the peoples of the world.
- ◆ The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice.
- ◆ New developments in Spinal Pathology.
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Emphasis on innovative methodologies in International Cooperation
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work.
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*Expand your knowledge through this Postgraduate Certificate that will allow you to specialize with a view to achieving excellence in this field"*

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*This Postgraduate Certificate is the best investment you can make when selecting a refresher program for two reasons: in addition to updating your knowledge of Tumor Pathology, you will obtain a qualification endorsed by TECH"*

The teaching staff includes professionals from the Tumor Pathology sector, who bring their experience to this specialization 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 an immersive training experience designed to train for real-life situations.

The design of this program is centered around Problem-Based Learning, in which the medical professional will resolve professional practice situations that may arise throughout the program. For this purpose, the specialist will be assisted by an innovative interactive video system that was created by renowned experts in Tumor Pathology, and experienced experts in neurosurgery with extensive experience.

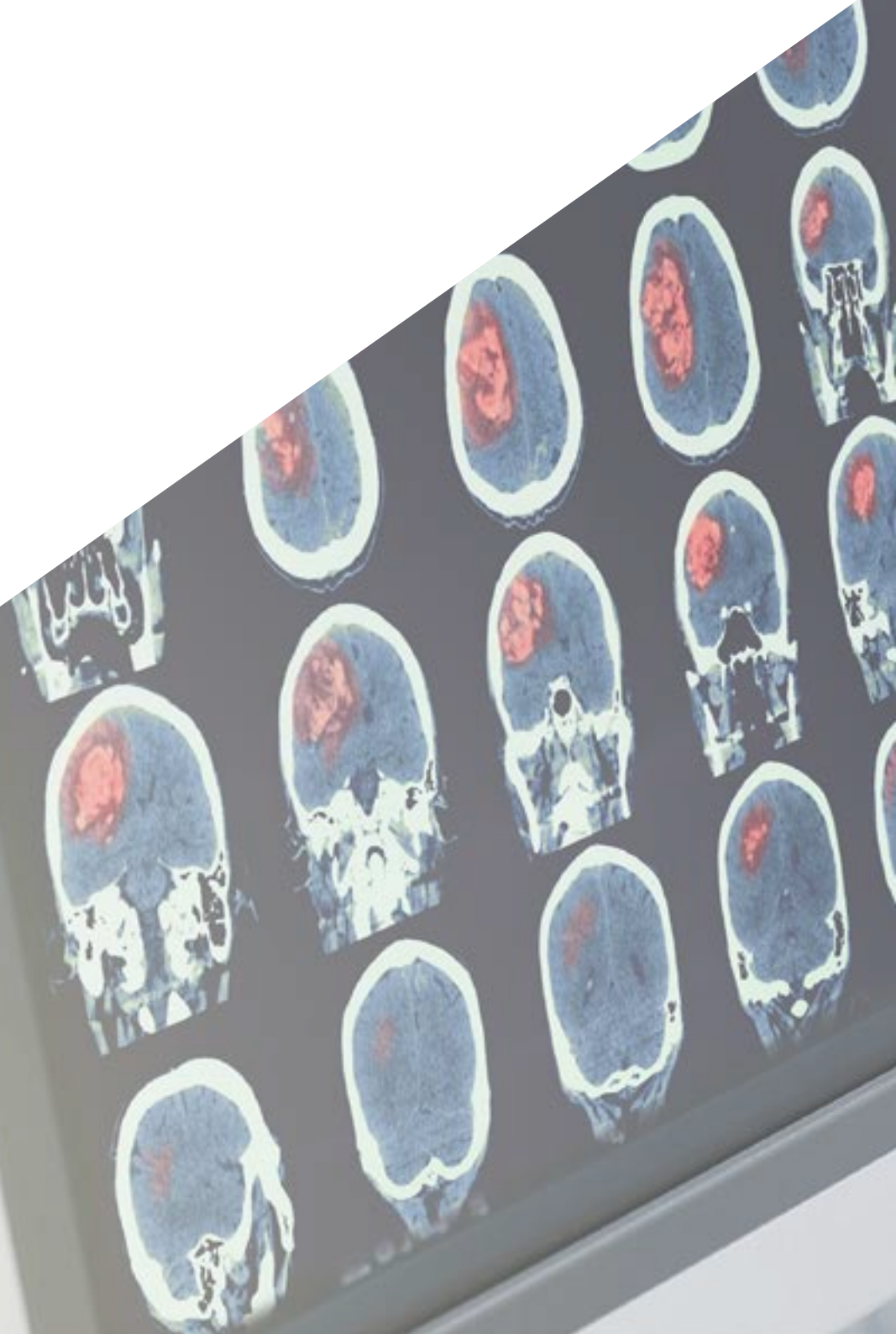
*Do not hesitate to take this training with us. You will find the best teaching material with virtual lessons.*

*This Postgraduate Certificate 100% online course will allow you to combine your studies with your professional work while increasing your knowledge in this field.*



# 02 Objectives

The Postgraduate Certificate in Tumor Pathology is aimed at facilitating the professional's performance with the latest advances and most innovative treatments in the sector.







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*Thanks to this Postgraduate Certificate you will be able to specialize in Neurosurgery and learn about the latest advances in the field”*



## General Objectives

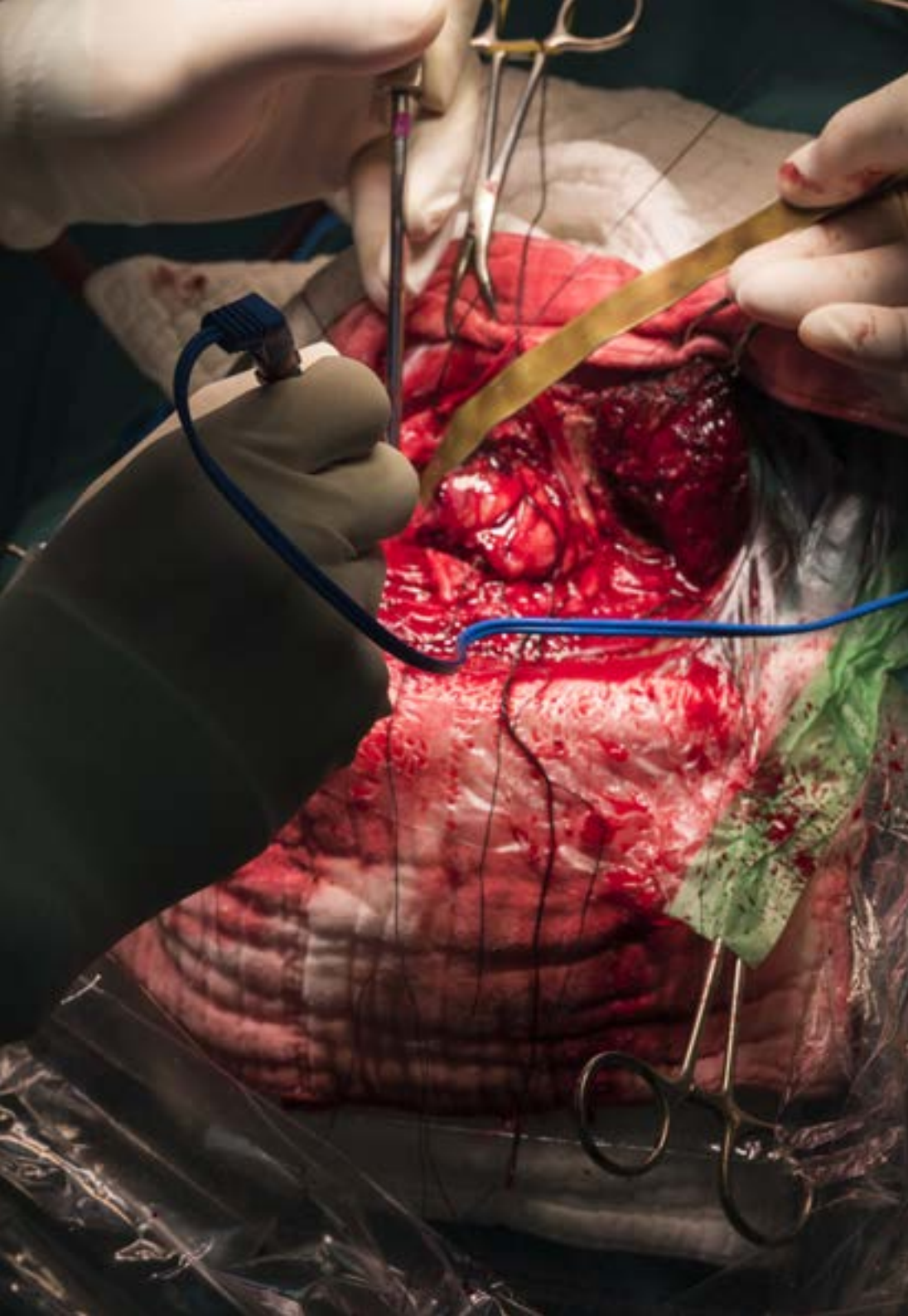
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- ◆ Acquire more in-depth knowledge of the speciality, with a practical approach to help professionals apply the information learned in their clinical practice, focusing on the latest diagnostic and therapeutic guidelines and the most recent scientific evidence.
- ◆ Learn the latest surgical techniques that have been implemented in recent years along with the knowledge of technological development in multiple areas of Neurosurgery



*Take the opportunity and take the step to get up-to-date on the latest developments in Tumor, Pathology”*





## Specific Objectives

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- ◆ Fully understand the histological and molecular basis of the classification of glial tumors and the prognostic and therapeutic implications derived from it, as well as learning the differential clinical and radiological characteristics of high-grade and low-grade glial tumors.
- ◆ Become familiar with the advances that have been adopted in the surgical treatment of glial brain tumors and how their application is decisive in improving patient prognosis.
- ◆ Recognize the importance of preserving neurological function in glial tumor surgery and know the tools available in neurosurgery to achieve this goal.
- ◆ Learn the role of other adjuvant therapies (radiotherapy and chemotherapy) in the treatment of brain gliomas and their contribution to improving prognosis.

03

# Course Management

The program's teaching staff includes leading experts in Neurosurgery, who contribute their vast work experience to this specialization program. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.





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*Leading experts in Neurosurgery have  
joined forces to share all their knowledge  
in the field with you”*

## Management



### Dr. Fernández Carballal, Carlos

- ◆ Head of the Spinal Pathology Section. Neurosurgery Service
- ◆ Gregorio Marañón General University Hospital
- ◆ Associate Neurosurgery Professor. Faculty of Medicine. Complutense University of Madrid
- ◆ PhD in Surgery from the Autonomous University of Madrid Faculty of Medicine, obtaining the qualification of outstanding cum laude.
- ◆ Member of the Spanish Society of Neurosurgery, Member of the Neurorachis Society, Member of the Spanish Society of Functional Neurosurgery (SENE)
- ◆ Master's Degree in Medical and Clinical Management from the Spanish Distance University (UNED).
- ◆ Degree in Medicine (University of Navarra, 1999)

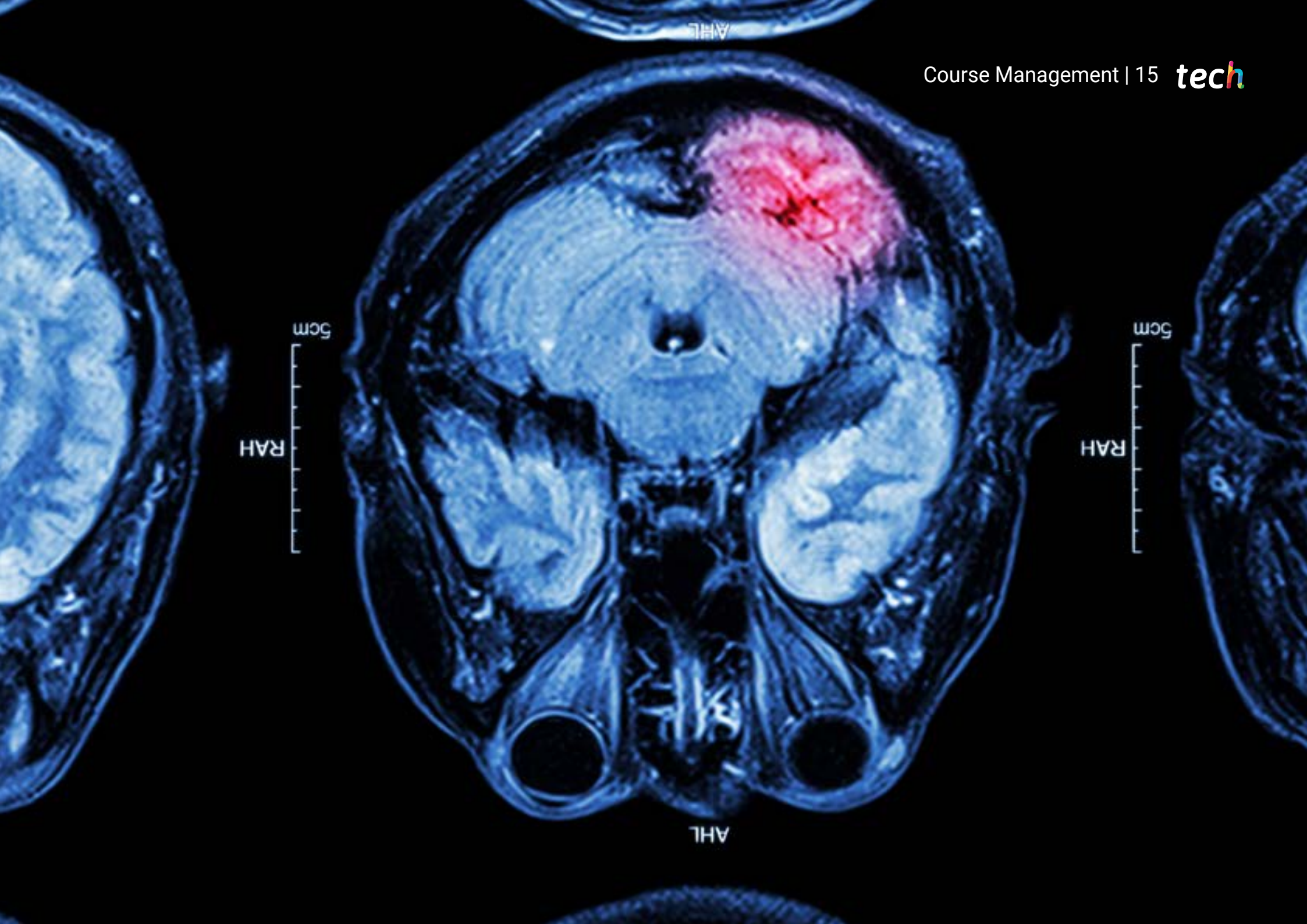
## Professors

### Dr. Valera Melé, Marc

- ◆ Neurosurgery Department. Gregorio Marañón General University Hospital
- ◆ Degree in Medicine from the Clinical Hospital of Barcelona

### Dr. García Leal, Roberto

- ◆ Head of Department. Neurosurgery Department. Gregorio Marañón General University Hospital
- ◆ Master's Degree in Management and Planning of Health Care Centers and Services". Business Excellence School
- ◆ Academic Director of "Grupo CTO", an entity dedicated to Undergraduate and Postgraduate Health Education in Medicine and Nursing
- ◆ Degree in Medicine and Surgery (June the Autonomous University of Madrid in 1996)



# 04

# Structure and Content

The structure of the content has been designed by the best professionals in the Tumor Pathology sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to teaching.







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*This Postgraduate Certificate in Tumor Pathology is the most comprehensive and up-to-date educational program on the market”*

## Module 1. Tumor Pathology I

- 1.1. Histological and Molecular Classification of Gliomas
- 1.2. Low-Grade Gliomas
- 1.3. High-Grade Gliomas
- 1.4. Therapeutic Algorithm in the Treatment of Gliomas
- 1.5. Advances in the Surgical Treatment of Gliomas
  - 1.5.1. Fluorescence-Guided Surgery
  - 1.5.2. Surgery in Eloquent Areas
- 1.6. The Role of Radiotherapy in the Treatment of Gliomas
- 1.7. Advances in Chemotherapy Treatment of Gliomas
- 1.8. Ependymal Tumors
- 1.9. Neuronal Tumors





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

05

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the ***New England Journal of Medicine*** have ***considered it to be one of the most effective***.



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*Discover Re-learning, 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 abundant 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. Gervas, 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.

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

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

1. 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.



## Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking 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 high socioeconomic profile and an average age of 43.5 years old.

*Re-learning 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 multimedia content presentation training Exclusive system 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 & Re-testing**

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 your goals.



**Classes**

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



**Quick Action Guides**

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



# 06 Certificate

The **Postgraduate Certificate in Tumor Pathology** guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by **TECH Technological University**.



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*Successfully complete this training program  
and receive your university certificate without  
travel or laborious paperwork"*

This **Postgraduate Certificate in Tumor Pathology** is the most comprehensive and up-to-date educational program on the market.

After passing the evaluation, the student will receive by mail their corresponding **Postgraduate Certificate** issued by **TECH Technological Univeristy** via tracked delivery.

This diploma contributes to the academic development of the professional and adds a high university curricular value to their training. It is 100% valid in all competitive examinations, labour exchanges and professional career evaluation committees.

Title: **Postgraduate Certificate in Tumor Pathology.**

ECTS: **6**

Official N° of Hours: **150 hours.**



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



**Postgraduate  
Certificate**  
Tumor Pathology

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

6 ECTS Credits

Teaching Hours: 150 hours.

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