



# Postgraduate Certificate Pheochromocytomas

and Paragangliomas

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/pk/medicine/postgraduate-certificate/pheochromocytomas-paragangliomas

# Index

> 06 Certificate

> > p. 28



Paragangliomas are rare tumors that arise in Paraganglia cells. When they attack the Adrenal Glands, they are more specifically called Pheochromocytomas. Although they are generally benign tumors, they can often cause symptoms such as headaches, sweating or heart palpitations in patients, which is why surgical or radionuclide treatment is necessary. This program trains Oncology Professionals in the correct approach to these Specific Tumors of the Endocrine System, with expert knowledge that will provide a very interesting way to improve their work. Despite being rare tumors, their treatment is very specific, so graduates can become a reference within their department.



# tech 06 | Introduction

Tumors affecting the Adrenal Glands, despite having a favorable prognosis of recovery and not being cancerous in most cases, can produce all kinds of symptomatologies and pain in patients. This leads to the need for the intervention of a physician to remove it or, in the event it is not operable, the prescription of another type of more appropriate treatment

It is precisely these treatments and subsequent monitoring that this Postgraduate Certificate at TECH emphasizes, so Oncology Professionals can specialize in a rare type of tumor that requires advanced knowledge to detect through imaging tests and know how to deal with effectively.

Through an extensive syllabus, students will review the Molecular Basis and Epidemiology of Pheochromocytomas and Paragangliomas, even learning the importance of Tumor Committees and Patient Associations throughout the monitoring process after diagnosis.

Students have a fundamental advantage when choosing this program, which is to be able to study it completely online. Thanks to this, with no class or timetable restrictions, students are free to choose when, where and how to take on the entire course load.

This **Postgraduate Certificate in Pheochromocytomas and Paragangliomas** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- Case studies presented by experts in Endocrine Oncologic
- 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
- 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
- Access to content from any fixed or portable device with an Internet connection



The future of education is already here.

Join the TECH academic family and make all the decisions regarding your training"



This Postgraduate Certificate will be decisive in your professional path toward Endocrine Oncology, giving you all the keys for Pheochromocytomas and Paragangliomas"

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 training programmed to train 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 student will be assisted by an innovative interactive video system created by renowned and experienced experts.

If you want to give a boost to your career surrounded by the best, you are in the best possible place.

Enroll today in this Postgraduate Certificate and take the first step toward a more prosperous medical future.







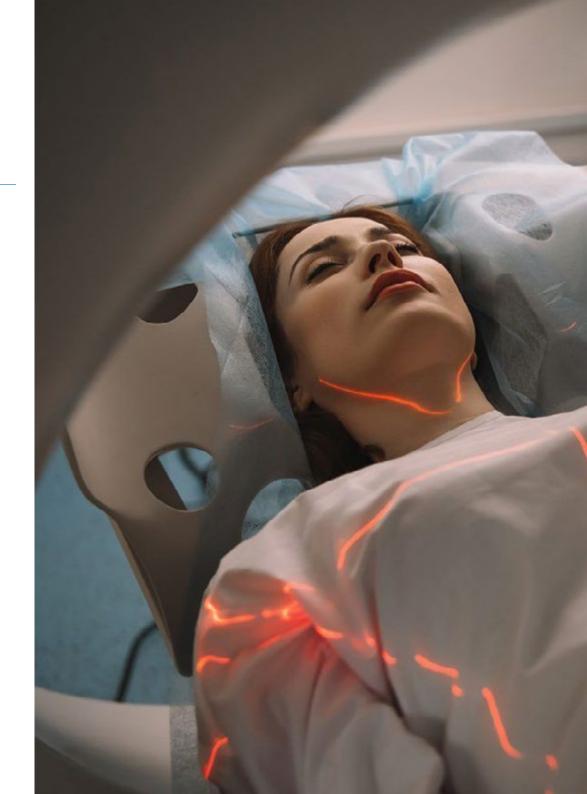


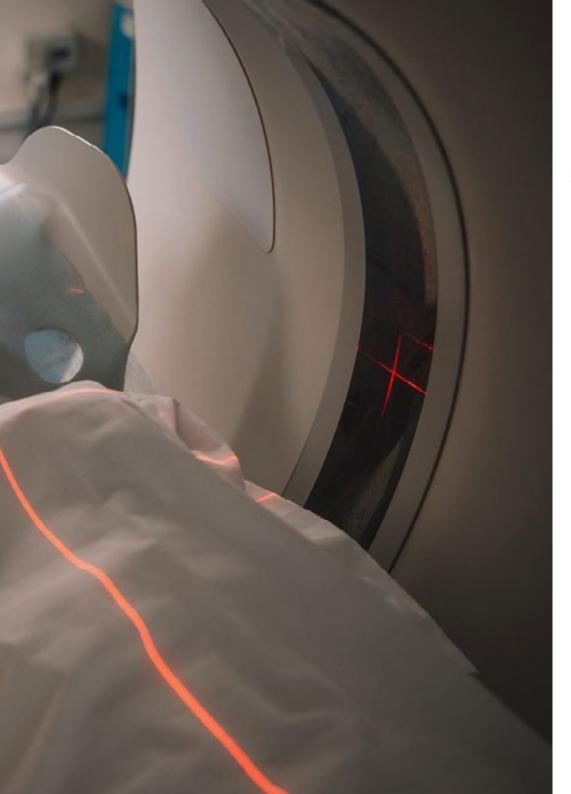
# tech 10 | Objectives



# **General Objectives**

- Deepen the knowledge, diagnosis and treatment of Endocrine Oncologic Pathology
- Achieve an update in the most novel aspects in the Diagnosis and Treatment of Endocrine Oncologic Pathology
- Advance in the Multidisciplinary Approach essential for the Management of Endocrine Oncologic Pathology







# **Specific Objectives**

- Advance in the Molecular Bases of these Tumors and the importance of Genetic Studies
- Delve deeper into the diagnosis, treatment and monitoring of Pheochromocytomas and Paragangliomas



It will take you less time than you think to get the job improvement you are looking for, demonstrating your desire to continue growing with this Postgraduate Certificate"





# tech 14 | Course Management

## Management



## Dr. Álvarez Escola, María Cristina

- Head of the Endocrinology and Nutrition Service at La Paz University Hospital
- Resident Tutor in the Endocrinology and Nutrition Service at the La Paz University Hospital
- Coordinator for the Endocrine Tumors Committee at La Paz University Hospital
- Coordinator for the Pituitary Tumors Committee and the Selar Area at La Paz University Hospital
- Coordinator for the SENDIMAD Neuroendocrinology Group
- Member of the National Commission of Endocrinology and Nutrition, Ministry of Health, Spain
- PhD in Medicine and Surgery from the University of Alcalá de Henares

### **Co-Direction**



### Dr. Fernández Martínez, Alberto

- Attending Physician Specialist in General Endocrinology at Móstoles University Hospital
- Attending physician specializing in Endocrinology and Nutrition at La Paz University Hospital
- Degree in Medicine from the University of Barcelona
- Postgraduate Specialization in Neuroendocrinology at the Oxford Centre for Diabetes, Endocrinology and Metabolism
- Endocrinology Team Assistant responsible for educational activities for diabetic patients at the Gran Canaria Diabetic Association
- Collaborating monitor for health education activities for diabetic patients



## Dr. Blanco Carrera, Concepción

- Endocrinology and Nutrition Resident Tutor at Príncipe de Asturias Hospital
- Specialist Physician in Endocrinology and Nutrition, Area III Specialized Care
- Medical Specialist in the Endocrinology Service at Albacete General Hospital
- PhD in Medicine and Surgery from the Autonomous University of Madrid.
- Specialist in Endocrinology and Nutrition, MIR training at Puerta de Hierro Hospital
- Master's Degree in Health Care Unit Clinical Management from Universidad Internacional Menéndez Pelayo

### **Professors**

#### Dr. Araujo Castro, Marta

- Medical Specialist in Endocrinology and Nutrition at Ramón y Cajal University Hospital
- Degree in Medicine and Surgery from the University of Santiago de Compostela
- Master's Degree in Health Care Unit Clinical Management from Universidad Internacional Menéndez Pelayo
- Master's Degree in Research Methodology in Health Sciences, Applied Statistics Laboratory, Autonomous University of Barcelona
- Diploma in Diabetes Mellitus Type 2 Treatment Future Expert Diplomas in Diabetes, Autonomous University of Barcelona

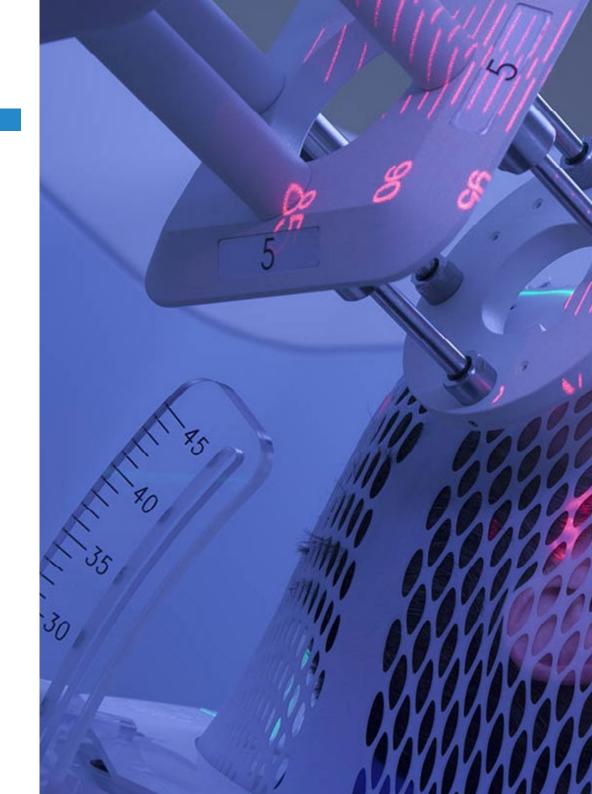




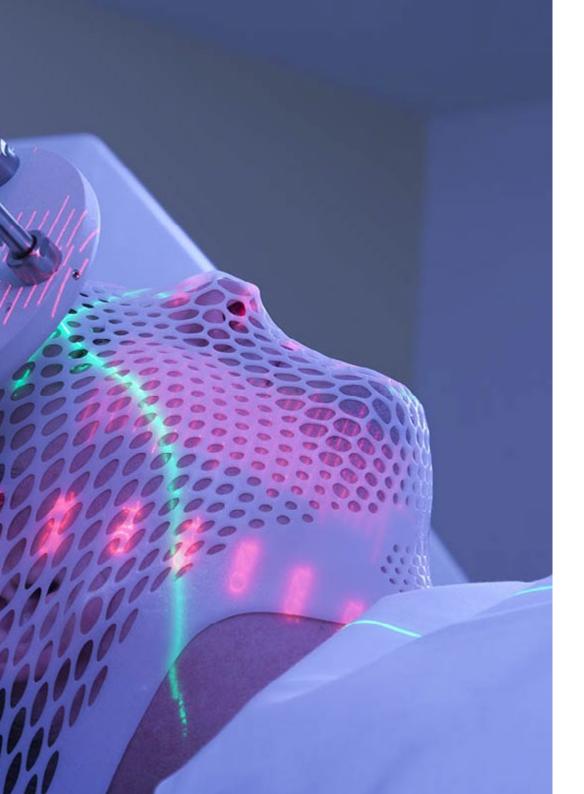
# tech 18 | Structure and Content

## Module 1. Pheochromocytomas and Paragangliomas

- 1.1. Introduction
  - 1.1.1. Anatomy Recap
  - 1.1.2. Epidemiology
- 1.2. Molecular Basis: Genotype-Phenotype Correlation
- 1.3. Clinical Manifestations: Ways It Presents Itself
- 1.4. Laboratory Data
- 1.5. Imaging Tests
- 1.6. Surgical Treatment
  - 1.6.1. Adrenergic Block
  - 1.6.2. Surgery for Pheochromocytomas and Paragangliomas: Embolization
- 1.7. Radionuclide Therapy: Radiotherapy
- 1.8. Treating Advanced Stages of the Disease
- 1.9. Prognosis and Monitoring
  - 1.9.1. Different Mutation Carrier Monitoring
  - 1.9.2. Long-Term Monitoring
  - 1.9.3. Prognosis
- 1.10. Importance of Tumor Committees and Patient Associations
  - 1.10.1. Multidisciplinary Approach
  - 1.10.2. Role of Patient Associations









You are at the best possible time to specialize in Endocrine Oncology and stand out among your fellow physicians"





# tech 22 | Methodology

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:

- 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.



## Methodology | 25 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been 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.

# tech 26 | Methodology

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



#### **Study Material**

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

These contents are then 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.









# tech 30 | Certificate

This Postgraduate Certificate in Pheochromocytomas and Paragangliomas contains the most complete and up-to-date scientific program on the market.

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

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

Title: Postgraduate Certificate in Pheochromocytomas and Paragangliomas Official N° of Hours: 150 h.



#### POSTGRADUATE CERTIFICATE

#### Pheochromocytomas and Paragangliomas

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.



# Postgraduate Certificate

Pheochromocytomas and Paragangliomas

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

