

# Postgraduate Certificate

## Multiple Endocrine Neoplasm Syndromes





## Postgraduate Certificate Multiple Endocrine Neoplasm Syndromes

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/multiple-endocrine-neoplasm-syndromes](http://www.techtute.com/us/medicine/postgraduate-certificate/multiple-endocrine-neoplasm-syndromes)

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# 01

# Introduction

Multiple Endocrine Neoplasm, Type I and Type II, has a much higher occurrence factor if there are family precedents. For this reason, it is necessary for Oncology physicians to have extensive knowledge in this area to diagnose it effectively and to carry out an adequate monitoring of all available treatments. This TECH program focuses precisely on evaluating carriers with gene mutations most likely to develop the different syndromes, as well as an analysis of the family environment to more effectively trace the tumor pathology. Student will graduate with a highly valued knowledge in Oncology, which will surely lead them to a position of greater relevance.





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*Don't fall behind in your career and learn the latest advances and treatments for Multiple Endocrine Neoplasia syndromes at TECH”*

In Endocrine Oncology, it is extremely important to know the main pathologies, especially if they are of hereditary origin, as they can help to detect and diagnose tumors earlier. Thus, Multiple Endocrine Neoplasm Syndromes represent an interesting field of research for every Oncologist, since their Hereditary Condition makes it possible to obtain a unique and distinctive specialization in every area of Oncology.

For this reason, the Postgraduate Certificate in Multiple Endocrine Neoplasm Syndromes has been developed by a team of Endocrinologists with experience in the treatment of this kind of pathologies, so students can obtain the best possible training in the field. Throughout the entire syllabus, students will learn the most advanced tests, techniques and treatments to effectively address Multiple Endocrine Neoplasm Type I and II.

TECH is aware students may have difficulties in undertaking the teaching requirements of a program of these characteristics, so it is offered in a completely online format, convenient for students because they can download the entire syllabus from any device with an Internet connection. As there are no classes or timetables, students can choose when, where and how to manage their study time.

This **Postgraduate Certificate in Multiple Endocrine Neoplasm Syndromes** 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 self assessment can be used 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



*At TECH you will find a teaching staff committed to their students, willing to give their best to see them grow professionally”*

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*The best Professional Oncologists must have training commensurate with the level of their career. Enroll today in this Postgraduate Certificate and be at the forefront of your department”*

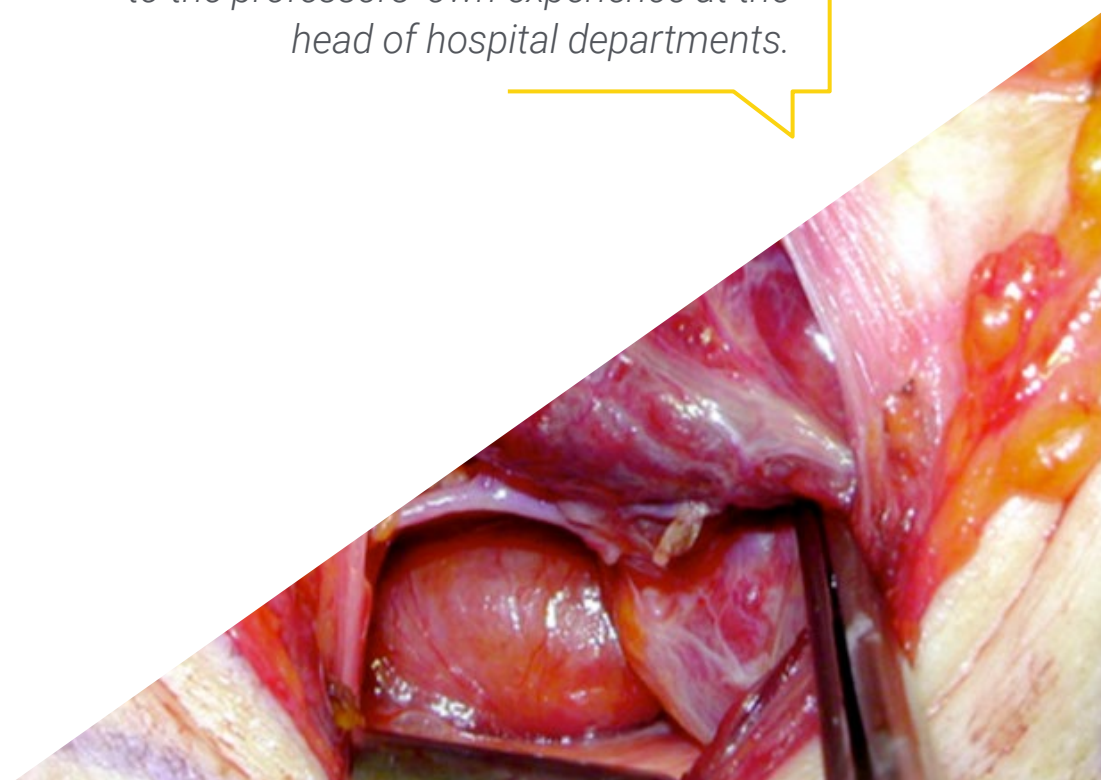
The program’s teaching staff includes professionals in the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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.

*This is the future of education, one in which you have the freedom to choose when you want to study, without being tied to schedules or classes.*

*You will be able to apply for healthcare positions of greater responsibility thanks to the professors' own experience at the head of hospital departments.*

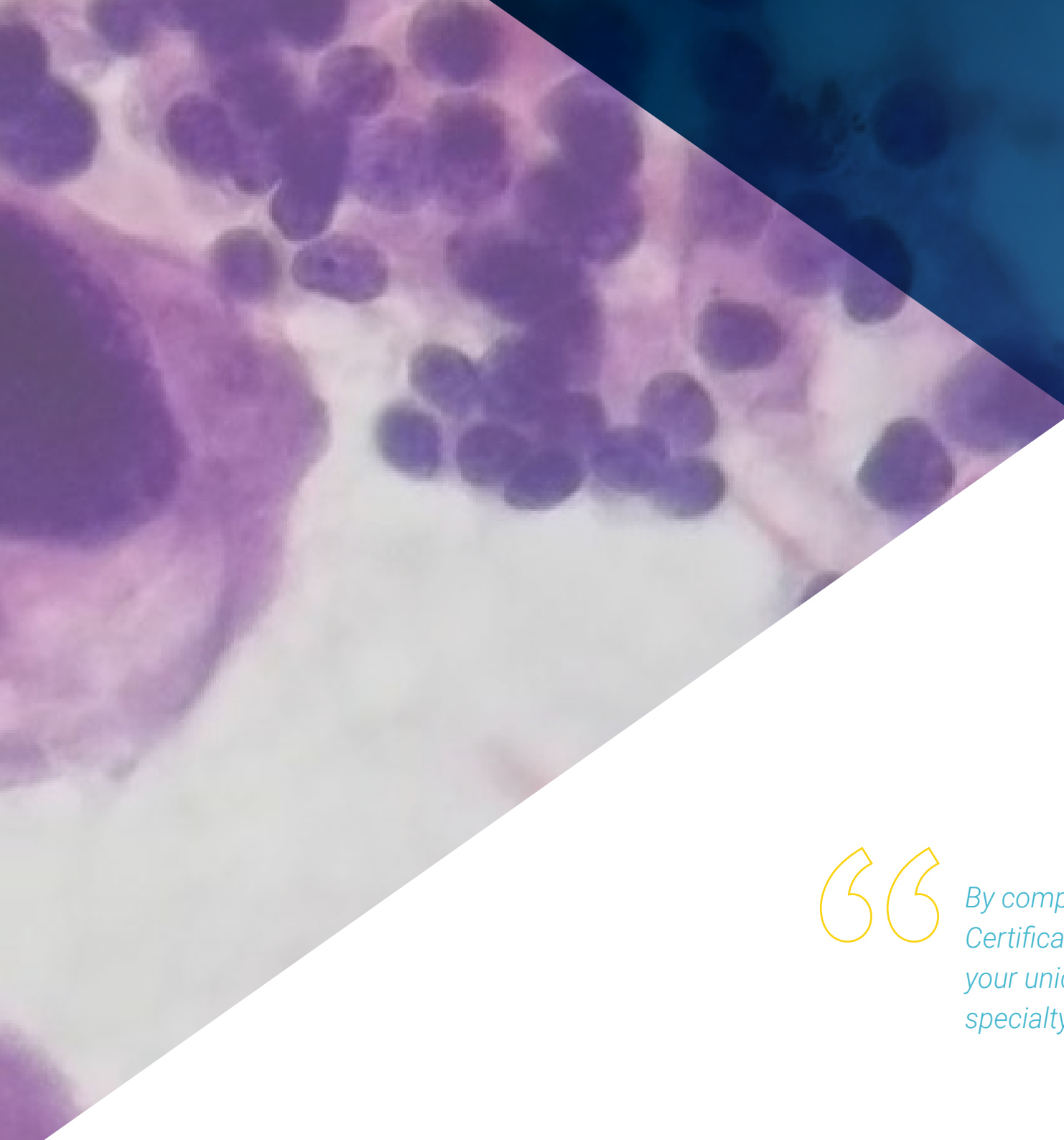


# 02 Objectives

The program objective is to offer its students a high quality specialization in the field of Endocrine Oncology, so they can obtain a professional and salary improvement according to their highest expectations. For this reason, students will find a syllabus based on the best teaching methodology in the academic world, relearning, which manages to consolidate the most important knowledge and skills of the program in a natural and progressive way.







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*By completing this Postgraduate Certificate, you will be adding quality to your unique resume with an excellent specialty in Adrenal Gland Tumors”*

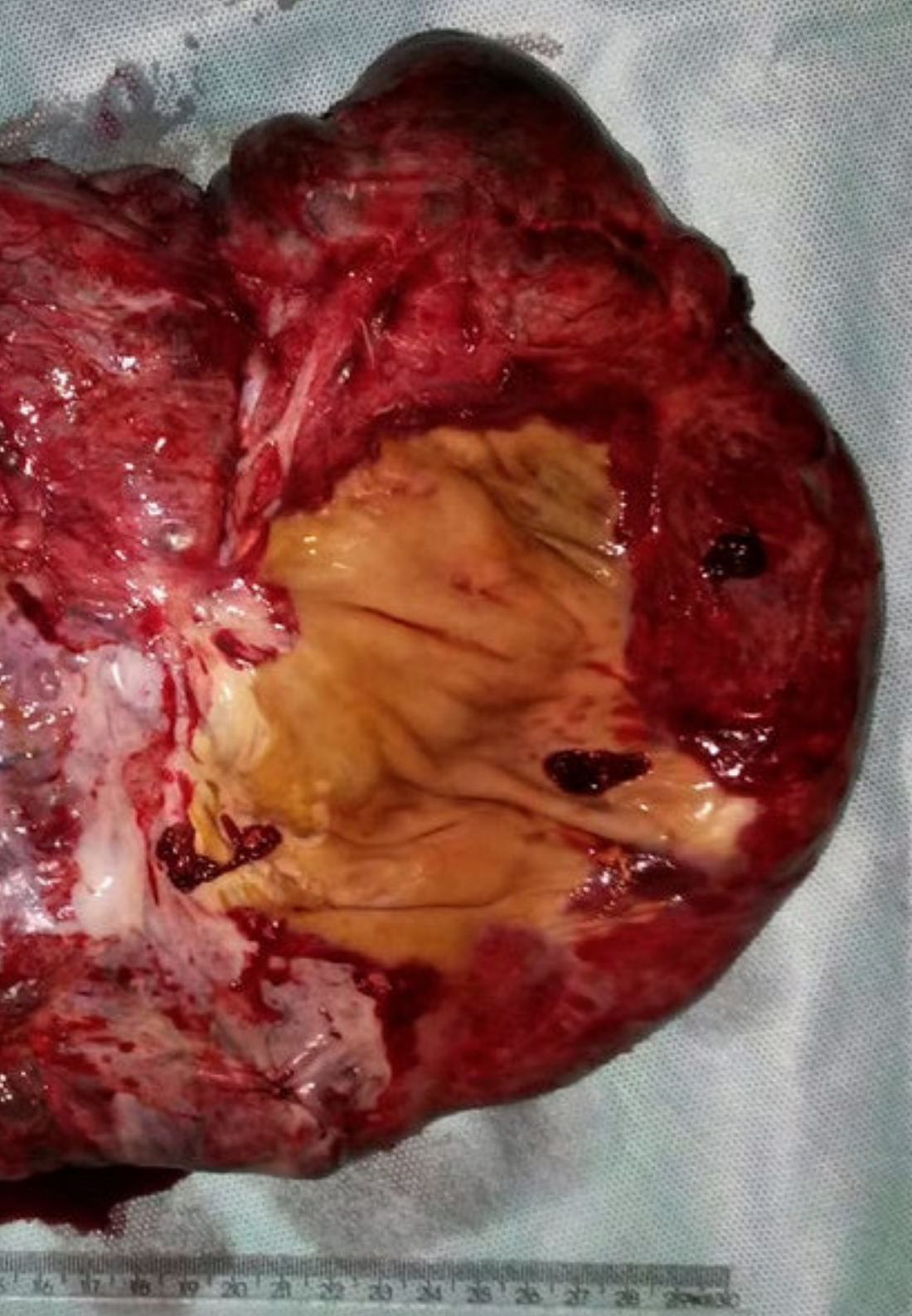


## General Objectives

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- ◆ 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

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- ◆ Advance in the knowledge of the Hereditary Syndromes of Multiple Endocrine Neoplasia
- ◆ Gain deeper understanding of how to monitor Gene Mutation Carriers for the different Syndromes
- ◆ Evaluate and monitor family members and relatives

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*You will see your expectations exceeded when you enroll in this Postgraduate Certificate, and see for yourself the quality of the teaching materials”*

# 03

# Course Management

TECH only trusts its programs to the best doctors and experts in the field. Therefore, the professors who have developed this Postgraduate Certificate in Multiple Endocrine Neoplasm Syndromes have extensive experience not only in the treatment of these pathologies, but even in the clinical management of an Endocrinology department. This guarantees that students will acquire useful knowledge for their professional career, which will allow them to access positions of greater responsibility and prestige in the medical field.



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*You will learn the techniques for approaching Multiple Endocrine Neoplasm Syndromes with professionals who know them first hand”*

## International Guest Director

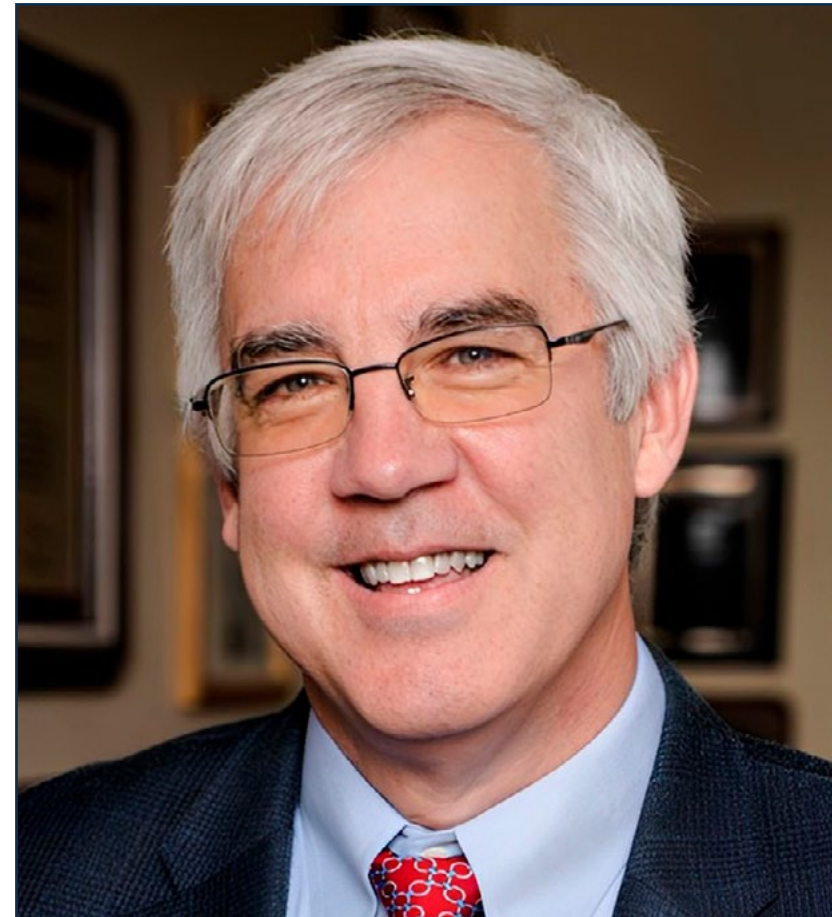
Dr. R. Michael Tuttle has developed, for more than 3 decades, a successful career in the medical field of Endocrinology. Thanks to his exceptional skills, this expert has received numerous international awards. He has received the Lewis Braverman Lectureship Award from the American Thyroid Association and the Knoll Pharmaceutical Mentor Award from the Endocrine Society.

He has also recently served as Clinical Director of the Endocrine Service at Memorial Sloan Kettering Hospital. He is also a permanent academic collaborator at Cornell University Medical School in New York.

In addition, Dr. Tuttle has distinguished himself on the clinical-research level. Specifically, he has delved deeply into the study of Thyroid Cancer and his work in this field has changed the paradigm regarding differentiated treatments (DTC) for this disease. Prior to his therapeutic innovations, all patients were treated with Total Thyroidectomy and Radioactive Iodine (RAI). However, this expert was one of the pioneers in using serum Thyroglobulin (Tg) as an indicator of residual DTC.

As such, he has led international studies that demonstrated the efficacy of recombinant thyrotropin (rhTSH) in determining TSH-stimulated Tg. This also led to the stratification of patients into risk categories and reduced the number of ionizing radiations. Together with his molecular analyses, his clinical work has opened a new scenario for multikinase inhibitor (TKI) therapies for radioiodine therapy-resistant DTC.

On the other hand, he has been a consultant to the Center for Disease Control for Radiation Exposure of Peoples in the Marshall Islands, the Hanford Downwinder Project, and a consultant to the National Academy of Sciences for Radiation Exposed Populations.



## Dr. Tuttle, R. Michael

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- Clinical Director of the Endocrinology Service at Memorial Sloan Kettering Cancer Center
- Specialist in Thyroid Cancer and Radioiodine Therapy.
- Academic Advisor, Cornell University Medical School, New York
- Fellowship at the Madigan Army Medical Center
- Residency in Medical Endocrinology at Dwight David Eisenhower Army Medical Center
- M.D. from the University of Louisville
- B.S. in Biology, Northern Kentucky University
- Member of:
  - Endocrine Society
  - American Thyroid Association
  - American Association of Endocrine Surgeons
  - American Association of Clinical Endocrinologists



*Thanks to TECH, you will be able to learn with the best professionals in the world"*

## 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

- ♦ Assistant 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. Lamas Oliveira, Cristina**

- ◆ Medical Specialist in the Endocrinology and Nutrition Service at Albacete University Hospital Complex
- ◆ Coordinator of the Neuroendocrinology Area, Spanish Society of Endocrinology Nutrition (SEEN)
- ◆ Secretary of the Castilian Manchegan Society of Endocrinology, Nutrition and Diabetes
- ◆ Degree in Medicine and Surgery from the Autonomous University of Madrid
- ◆ Specialist in Endocrinology and Nutrition, Puerta de Hierro Hospital
- ◆ PhD in Medicine and Surgery with extraordinary doctoral award for the thesis "Cushing's Disease: Results of surgical treatment and analysis of prognostic factors of cure and recurrence in long term monitoring"

# 04

## Structure and Content

The effort of TECH staff and professors to make their programs useful for the professional growth of practitioners is palpable in the structure and content of their syllabuses. Therefore, students will find in this Postgraduate Certificate a selection of real clinical cases in which to contextualize all the theory learned. This, together with the support of audiovisual material throughout the program, greatly reduces the teaching load and helps students to pass this Postgraduate Certificate more directly.



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*This Postgraduate Certificate adapts to your responsibilities, without forcing you to sacrifice your personal or professional life to improve your career”*

## Module 1. Multiple Endocrine Neoplasia Syndromes

- 1.1. Multiple Endocrine Neoplasia Type I (MEN I): Genetics
  - 1.1.1. MEN I Genetics
  - 1.1.2. When to Perform a Genetic Study to Rule Out Mutation in the Menin Gene
  - 1.1.3. Genetic Counseling for MEN I: Preimplantational Diagnosis
- 1.2. Clinical Manifestations of the Syndrome: Ways MEN I Presents Itself
- 1.3. Laboratory Tests at Initial Evaluation and Subsequent Monitoring
- 1.4. MEN I. Imaging Tests at Initial Evaluation and Subsequent Monitoring
- 1.5. MEN I. Primary Hyperparathyroidism (PHPT) Treatment: Relapse Management
- 1.6. MEN I. Pancreatic Neuroendocrine Tumors: Surgical Indications
- 1.7. Managing of Other Tumors
  - 1.7.1. Neuroendocrine Tumors (NETs) in Atypical Locations: Bronchial and Thymic NETs
  - 1.7.2. Screening, Monitoring and Treatment for Other Neoplasms
- 1.8. Multiple Endocrine Neoplasm Type II (MEN II): MEN II Genetics
  - 1.8.1. RET Oncogene
  - 1.8.2. Genotype-Phenotype Correlation
  - 1.8.3. Less Common Mutations
- 1.9. MEN II: Medullary Carcinoma
  - 1.9.1. Evaluation and Monitoring after Knowing the Carrier's Condition
  - 1.9.2. Prophylactic Thyroidectomy
- 1.10. MEN II: Primary Pheochromocytoma and Hyperparathyroidism
  - 1.10.1. Evaluation and Monitoring after Knowing the Carrier's Condition
  - 1.10.2. Indications for Hyperparathyroidism Treatment in MEN II Patients
  - 1.10.3. Other MEN II Manifestations
- 1.11. MEN II: Other MEN II Manifestations
- 1.12. Others Multiple Endocrine Neoplasm Syndromes





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*The most complete course in Multiple Endocrine Neoplasm Syndromes is at your fingertips, don't wait any longer and enroll today”*

# 05 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.





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*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.



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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.

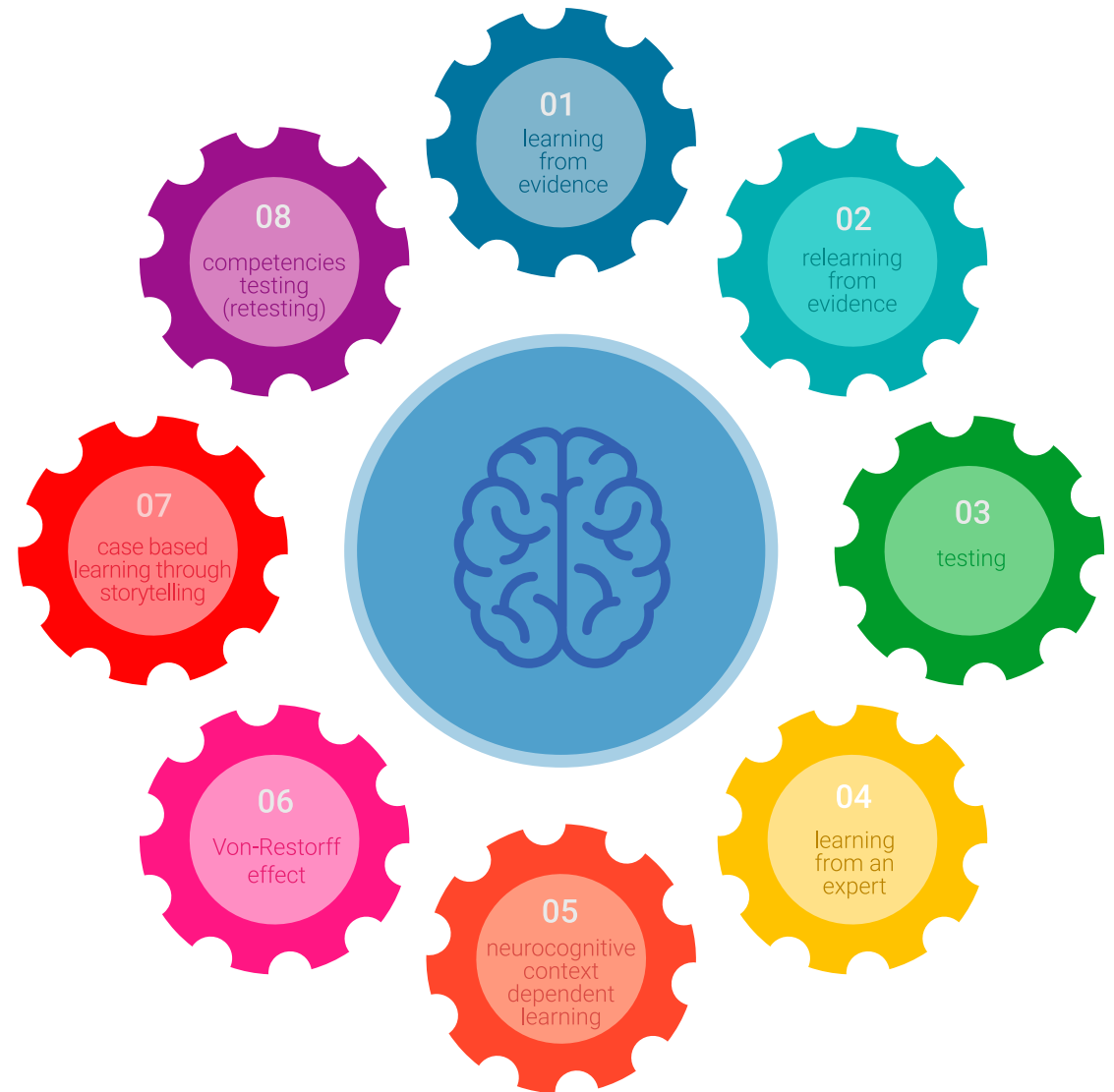


## Relearning Methodology

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.



# 06 Certificate

The Postgraduate Certificate in Multiple Endocrine Neoplasm Syndromes guarantees, in addition to the most rigorous and up to date training, access to a qualification issued by TECH Technological University.





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*Successfully complete this training program and receive your diploma without travel or laborious paperwork”*

This **Postgraduate Certificate in Multiple Endocrine Neoplasm Syndromes** 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** diploma issued by **TECH Technological University** via tracked delivery\*.

The diploma 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 Multiple Endocrine Neoplasm Syndromes**

**Official N° of hours: 150 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.



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community commitment  
personalized service innovation  
knowledge present  
online training  
development language  
virtual classroom



**Postgraduate Certificate**  
Multiple Endocrine  
Neoplasm Syndromes

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- » Certificate: TECH Technological University
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