



### Postgraduate Certificate

Hormones and Their Connection to Aging. Hormone Therapy

» 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/hormones-connection-aging-hormone-therapy

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### tech 06 | Introduction

The endocrine system is comparable to a complex set of gears that allows the human body to function optimally. This complex system is regulated by hormones, molecular messengers that act at different levels and allow the organism to survive and normally develop all its functions.

Aging also has effects on the endocrine glands, which are responsible for hormone secretion, altering the normal development of their functions and, therefore, reducing the body's capabilities. This leads to a deleterious effect on the functions of the endocrine system, which implies a mechanism that, feeding back on itself, in turn generates increased aging.

The specific case of women is one of the greatest exponents of aging at the hormonal level, especially due to the rapidity of the onset of the process in comparison with others who are also subject to aging, but that nevertheless present a much more gradual evolution,

Consequently, special attention will be paid to the hormonal changes derived from the female climacteric period, since it is one of the most widely studied and known. Moreover, a wider range of therapies has been proposed to alleviate the effects of aging.

To expand knowledge in this field, at TECH we have designed this Postgraduate Certificate, which specializes professionals to carry out a comprehensive approach to their patients from a multidisciplinary point of view. This way, we understand that only from a source of knowledge in disciplines that at first may seem independent, but which are closely interrelated, can a process as complex and multifactorial as aging be approached with guarantees.

This **Postgraduate Certificate in Hormones and Their Connection to Aging. Hormone Therapy** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Developing practical cases presented by experts in anti-aging Medicine
- 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 hormone therapy
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in hormone therapy
- 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



### Introduction | 07 tech



This Postgraduate Certificate is the best investment you can make in selecting a refresher program for two reasons: in addition to updating your knowledge hormone therapy, you will obtain a degree from the main online University in Spanish: TECH Technological University"

The teaching staff includes professionals from the field of aesthetic medicine, who bring their 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.

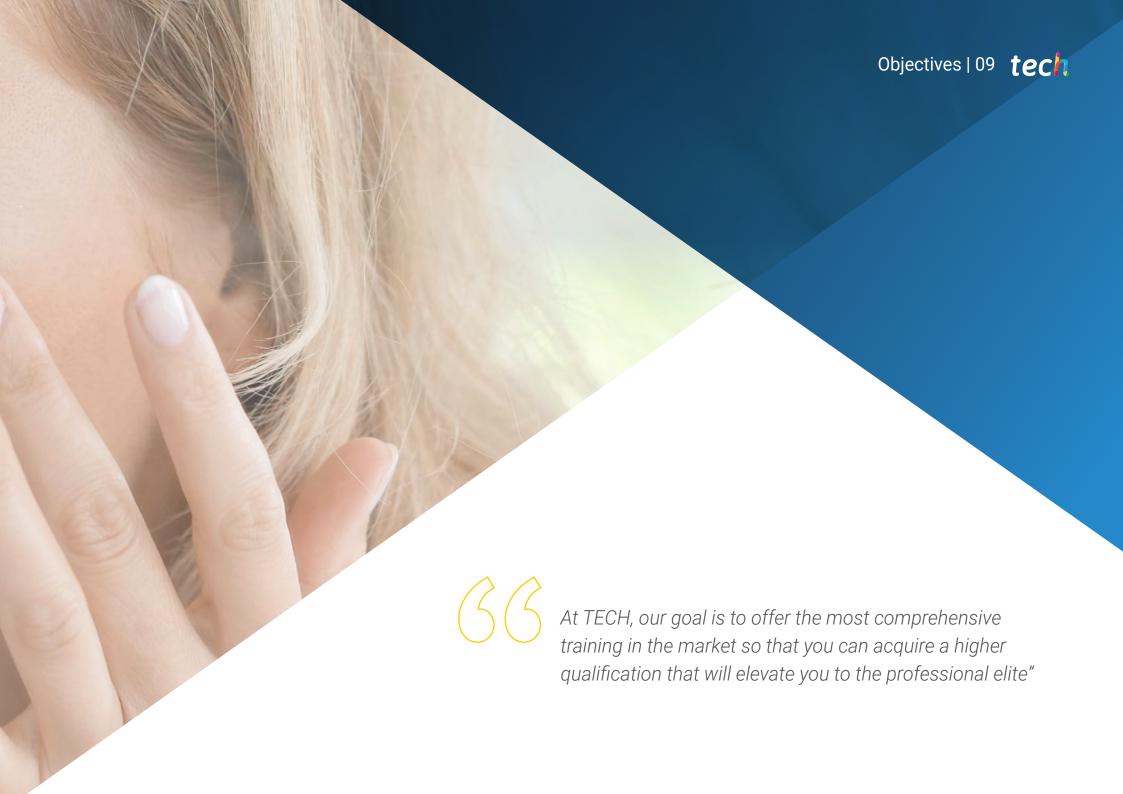
This program is designed around Problem-Based Learning, whereby the Surgeon must try to solve the different professional practice situations that arise during the academic year. For this purpose, the professional will be assisted by an innovative Interactive video system, developed by renowned and extensively experienced experts in hormone therapy.

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

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







### tech 10 | Objectives



### **General Objectives**

- Establish the critical relationship between endocrinology and aging
- Analyze the integrated effect of senescence at the hormonal level
- Propose hormonal therapeutic alternatives in relation to hormonal failure



With this program we want to meet your objective of acquiring superior training in this highly demanded field"





### Objectives | 11 tech



### **Specific Objectives**

- Addressing the complex endocrinological system of human beings
- Describe the role of stress and related hormones as they pertain to aging
- Develop the close interrelationship between neurodegeneration and melatonin deficiency
- Determine the important role played by GH in the different stages of human life
- Analyze the hormonal aspects involved in menopause as an accelerated example of aging in women
- Determine the difference between synthetic and bioidentical hormones and understand their usefulness in anti-aging medicine
- Achieve the capabilities to initiate hormone therapy prescribing





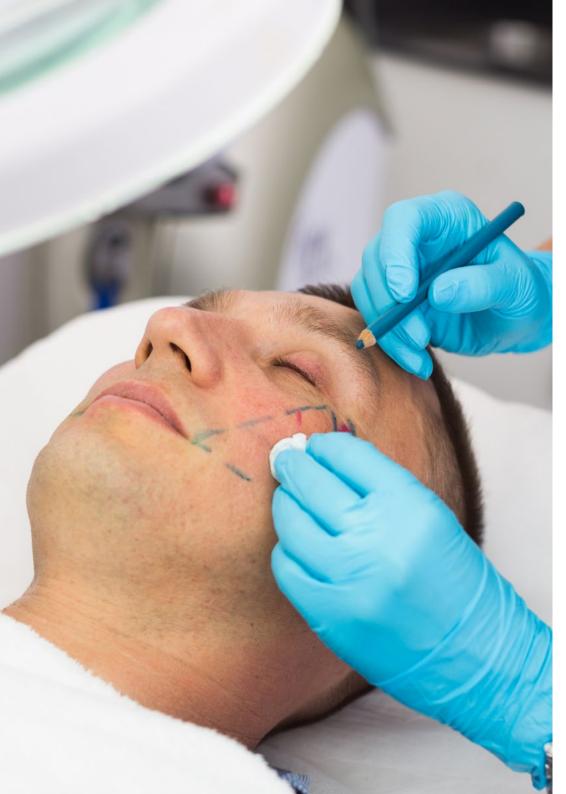
### tech 14 | Course Management

#### Management



#### Dr. Morante Tolbaños, Cristina

- Hair Surgeon at the Medical Laser Institute
- Professor of the Master in Hair Transplant at the Catholic University of Murcia since 2020
- Professor of the Master in Hair Medicine and Transplant at the Alcalá University of Henares since 2016 Professor
- · Medical hair treatments and hair surgery Medical Management Hair Transplant 360° Hair Transplant. 2020-2021
- Medical Director Hair Surgery Unit MAN Clinic Madrid. 2019-2020
- · Doctorate in Legal and Forensic Medicine from the Complutense University of Madrid
- · Master's Degree in Hair Medicine and Transplant at Alcalá de Henares University
- Master' in Esthetics and Anti-Aging Medicine at Complutense University of Madrid
- · Master in Accident and Emergency Medicine at the Complutense University of Madric
- · Master's Degree in Health and Social Action Center Management at Universidad Complutense de Madrid



### Course Management | 15 tech

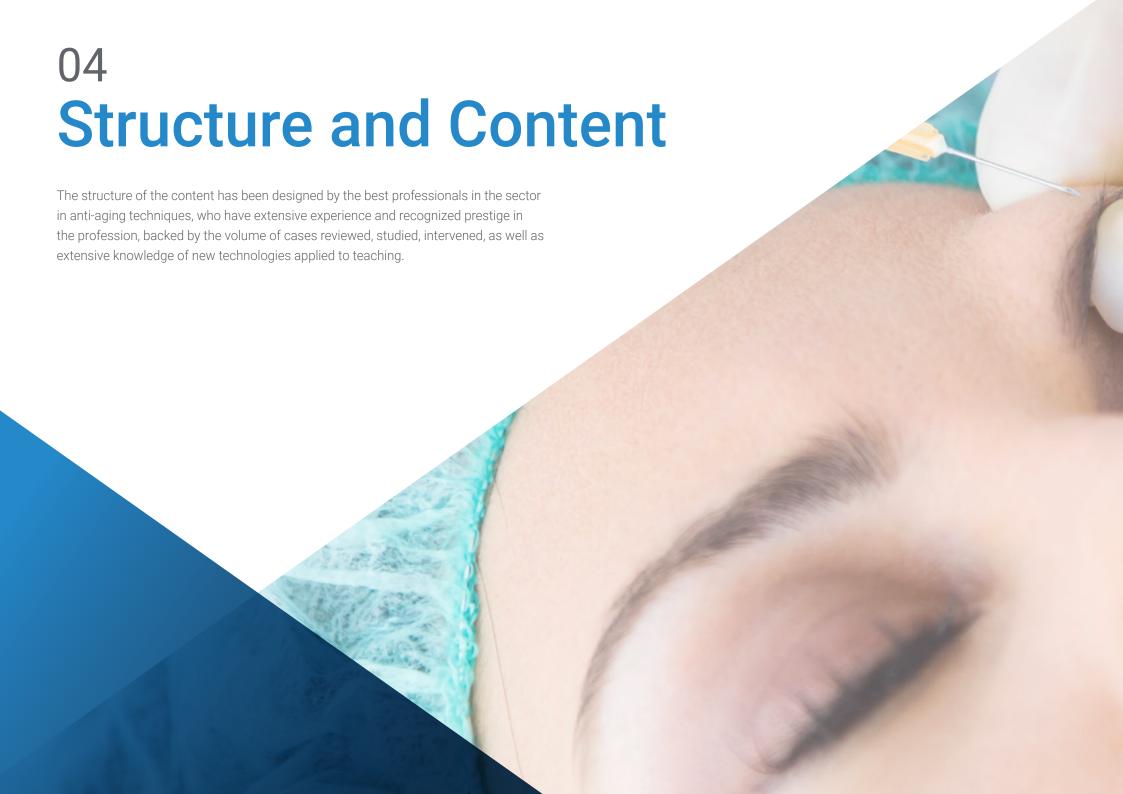
#### **Professors**

#### Dr. García Medina, Noemí

- \* Head of Aesthetic Medicine at DORSIA CASTELLÓN clinic
- Teaching collaborator in the training program of the Family and Community Medicine specialty in Castellón.
- Master's Degree in Aesthetic Medicine from the University of Valencia
- Diploma Toxin Botulinum Type A and Its Use in Aesthetic Medicine SEME
- Diploma of Dermal Filler Implants in Aesthetic Medicine SEME
- Trichology Emerging treatments in Alopecia SEME
- Degree in Medicine and General Surgery at the Complutense University of Madrid Spain



The best professionals are at the best university. Don't miss the opportunity to study with them"



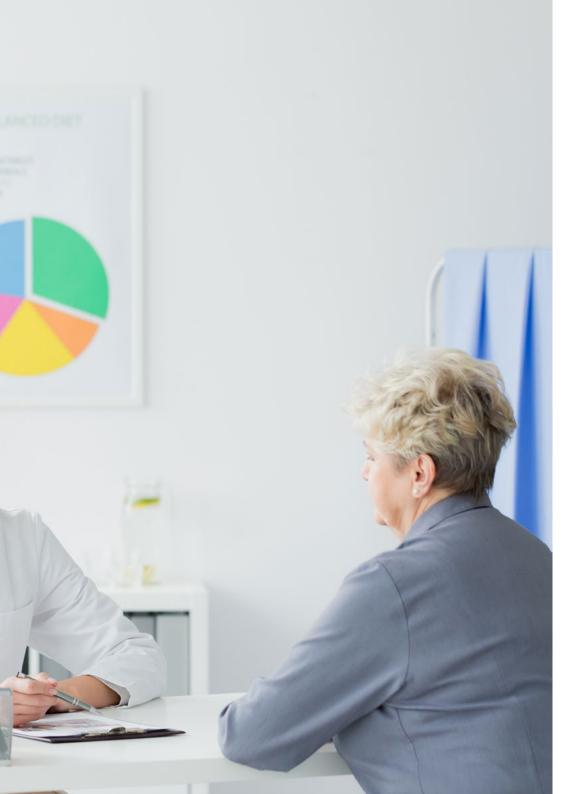


### tech 18 | Structure and Content

#### Module 1. Hormones and Their Connection to Aging. Hormone Therapy

- 1.1. Endocrinology and Anti-Aging
  - 1.1.1. Hormone Synthesis
  - 1.1.2. Hormone Transport
  - 1.1.3. Degradation of Hormones
- 1.2. Neuroimmunoendocrine Axis
  - 1.2.1. Hypothalamus/Pituitary/Thyroid Axis
  - 1.2.2. Hypothalamus/Pituitary/Liver Axis
  - 1.2.3. Hypothalamus/Pituitary/Pituitary/Adrenal Axis
- 1.3. Stress and Premature Aging
  - 1.3.1. Oxidative stress
  - 1.3.2. Inflammation
  - 1.3.3. Neurodegeneration
- 1.4. Thyroid + Adrenal Cortex
  - 1.4.1. Thyroid Hormone
  - 1.4.2. Alteration of the Thyroid Gland
  - 1.4.3. Cortisol, Aldosterone and Steroid Hormones Synthesized in the Adrenal Cortex
    - 1.4.3.1. Synthesis
    - 1.4.3.2. Neuroendocrine Regulation
    - ${\it 1.4.3.3.}\ {\it Pathologies\ Derived\ from\ the\ Alteration\ of\ Hormone\ Secretion}$ 
      - 1.4.3.1.1. Pathologies Related to the Secretion of Cortisol
      - 1.4.3.1.2. Pathologies Related to Aldosterone Secretion
      - 1.4.3.1.3. Pathologies Related to Sex Hormone Synthesis
- 1.5. Melatonin and Neurodegeneration
  - 1.5.1. Melatonin, Neuroendocrine Synthesis and Regulation
  - 1.5.2. Functions of Melatonin and its Role in Neurodegeneration
  - 1.5.3. Clinical Uses of Melatonin
- 1.6. Growth Hormone
  - 1.6.1. Synthesis
  - 1.6.2. Neuroendocrine Regulation
  - 1.6.3. Functions





### Structure and Content | 19 tech

- Growth and Anti-Aging Hormone
  - 1.7.1. Clinical Applications
  - Side effects 1.7.2.
  - Treatment 1.7.3.
- 1.8. Menopause 1
  - 1.8.1. Hormonal Changes in Menopause
  - Clinical manifestations
  - 1.8.3. Treatment
- 1.9. Menopause 1 Osteoporosis
  - 1.9.1. Types of Osteoporosis
  - Pathogenic Factors
  - 1.9.3. Diagnosis
  - 1.9.4. Treatment
- 1.10. Synthetic and Bioidentical Hormones Hormone Therapy
  - 1.10.1. Basic Concepts
  - 1.10.2. Advantages and Disadvantages of Bioidentical Hormones
  - 1.10.3. Hormone Therapy
  - 1.10.4. Hormone Therapy



A unique, key, and decisive

Training experience to book Training experience to boost your professional development"





### tech 22 | Methodology

#### 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.
- 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**

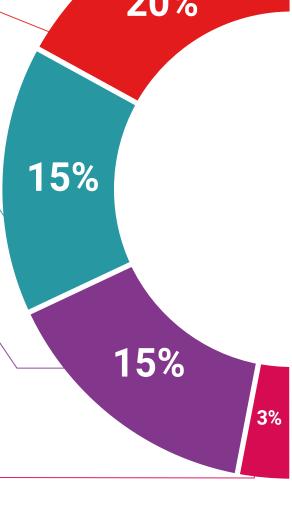
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many 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 Hormones and Their Connection to Aging. Hormone Therapy** contains the most complete and updated scientific program on the market.

After the student has passed the evaluations, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** by 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 labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Certificate in Hormones and Their Connection to Aging. Hormone Therapy

Official N° of hours: 150 h.



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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