

Postgraduate Certificate

Hypothalamus, Pituitary Gland and Autoimmune Pathology



Postgraduate Certificate Hypothalamus, Pituitary Gland and Autoimmune Pathology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-certificate/hypothalamus-pituitary-gland-autoimmune-pathology

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01

Introduction

In the field of Endocrinology, it is of vital importance to have access to the most recent advances, especially when dealing with areas such as Hypothalamus, Pituitary Gland or Autoimmune Pathology. Different developments in hypopituitarism, pituitary tumor syndromes or central diabetes insipidus allow the specialist in these areas to access an unbeatable framework for action in the fight against some of the most worrying endocrine pathologies. TECH has brought together in this university program a group of professionals with extensive experience in the field, contributing their practical vision that, together with the latest scientific postulates, make up the best possible updating option.



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Get up to date on the latest developments regarding disorders of secretion, regulation, biosynthesis or autonomous hormone production"

In order to obtain a clear view of the most recent developments in endocrine pathologies, it is important, first of all, to analyze the advances and latest research developed in general in this area. Thus, the most recent studies on metabolism, hormones, coenzymes or endocrine pathophysiology establish a preferential research framework to address other more specific aspects of the specialty.

For the extensive work involved in this task, TECH has assembled a team of experts in Endocrinology. This teaching group has demonstrated extensive experience and knowledge not only of the most complex endocrine pathologies, but also of the most efficient and cutting-edge medical approaches. Therefore, the syllabus is enriched by both a theoretical and practical approach, including numerous real clinical cases and complementary readings.

Adapted to the most current scientific theses, this program reviews the main advances in the area of the Hypothalamus, Pituitary Gland and Autoimmune Pathologies. All this in a convenient 100% online format that allows the specialist to combine this program with the most demanding professional responsibilities. The entire syllabus is available from the first day, with no pre-set timetables or classes, which allows total flexibility to take on the teaching load.

This **Postgraduate Certificate in Hypothalamus, Pituitary Gland and Autoimmune Pathology** contains the most complete and up-to-date educational program on the market. The most important features include:

- ◆ The development of case studies presented by experts in Endocrinology
- ◆ 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 for experts and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



Incorporate into your daily practice the most recent developments in the treatment of inadequate ADH secretion, central diabetes insipidus or autoimmune polyglandular syndromes”



You will be able to rely on the faculty for support on the most difficult technical issues, getting a personalized response and advice”

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.

You will choose when, where and how to take on the entire course load, being able to access the entire syllabus from any device with an internet connection.

You will have access to a syllabus full of exercises, multimedia content and complementary readings as support material for all the study work.



02 Objectives

Given that the updating in such a specific field as the hypothalamus or pituitary must be exhaustive, the objective of this degree is none other than to provide the specialist with the most current and current knowledge, theses and clinical practices. In this way, you will be able to incorporate this knowledge into your daily practice even before the end of your degree.





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Your professional objective and TECH's are aligned. That's why you'll have the most powerful educational technology in academia at your disposal”



General Objective

- ◆ Be able to accurately interpret currently available clinical information and associate it effectively in clinical practice

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It deepens and modernizes the novelties on hypothalamic and pituitary gland physiology, with topics dedicated to nutrients, lipids or proteins”





Specific Objectives

- ◆ Update knowledge in biology, biochemistry and physiopathology of the endocrine system
- ◆ Delve into the main clinical entities affecting the hypothalamic-pituitary axis
- ◆ Deepen in the autoimmune polyglandular syndromes

03

Course Management

As mentioned above, the teaching staff in charge of the development of this degree has an extensive background in endocrinology and other related areas. Coming from hospitals of high national prestige, the teachers have first-hand knowledge of the most urgent reality in this area, giving a practical aspect to all the theory that, undoubtedly, will be a great impulse for the work of updating the Specialist.



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The teachers know your needs and academic requirements, so you will find a whole syllabus to meet your expectations”

International Guest Director

Awarded on multiple occasions for her contribution to the field of Medicine, Dr. Susan Samson is a prestigious physician highly specialized in **Endocrinology, Diabetes** and **Metabolism**. In fact, she has devoted most of her professional career to optimizing the overall well-being of patients with endocrine disorders, ranging from *Diabetes Mellitus* to Hyperthyroidism.

Therefore, she has carried out her duties in health institutions of international reference such as the Mayo Clinic Hospital in the United States. Among her main achievements, she has developed innovative **evaluation methodologies** based on the latest scientific evidence. This has enabled healthcare professionals to design **personalized** and more effective **treatments**, taking into account the specific needs of each user. At the same time, it has implemented various monitoring programs based on emerging technologies such as **Telemedicine** and even **Artificial Intelligence**. Thanks to this, it has enabled **real-time monitoring** of the clinical status of numerous individuals with **chronic diseases** to improve their quality of life.

On the other hand, she has balanced these tasks with her role as **President of the American Association of Clinical Endocrinology**. In this way, she has contributed significantly to the creation of **care protocols** for people with different conditions. She has also collaborated with regulatory agencies to develop **health policies** to address the optimization of care for patients with long-term conditions.

In her commitment to clinical excellence, she has led several **scientific research** projects in areas ranging from addressing **Pituitary Pathologies** or **Acromegaly** to **Cushing's Disease**. Likewise, these findings have driven advances to maximize the quality of care. In this sense, her work has been rewarded in the form of awards, such as the "Rising Star Award" given by the Baylor College of Medicine for her outstanding leadership.



Dr. Samson, Susan

- ♦ President of the Department of Endocrinology at Mayo Clinic Hospital in Florida, United States
- ♦ President of the American Association of Clinical Endocrinology
- ♦ Director of the Baylor St. Luke's Pituitary Center in Texas
- ♦ Internship in Endocrinology, Diabetes and Metabolism at Baylor College of Medicine
- ♦ M.D. from Queen's University
- ♦ Doctor of Philosophy with specialization in Molecular Biology, University of Calgary.
- ♦ Member of the Royal College of Physicians and Surgeons of Canada

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

Management



Dr. Gargantilla Madera, Pedro

- Chief of Internal Medicine Service of El Escorial University Hospital
- Professor of the Francisco de Vitoria University
- Science communicator and regular contributor to various media (RNE, Abc digital, Huftington post, Cinco Noticias)
- Member of the Association of Medical Writers and Artists (ASEMEYA)
- Master's Degree in Clinical Unit Management

Professors

Dr. de la Fuente Bitaine, Laura

- ◆ Area Specialist Physician at Hospital 12 de Octubre
- ◆ Coordinator of the Reproduction Unit of the Hospital 12 de Octubre, Madrid
- ◆ Member of the Human Reproduction Unit at Hospital 12 de Octubre and

Tambre Clinic

- ◆ Co-director and Professor of the Master's Degree in Human Reproduction at UCM and SEF
- ◆ Associate Professor of the Complutense University of Madrid
- ◆ Degree in Medicine and Surgery from the Autonomous University of Madrid.
- ◆ Doctor Cum Laude of Medicine from the Complutense University of Madrid

Dr. Pérez Blanco, Carmen

- ◆ Specialist Physician in Endocrinology and Nutrition at El Escorial Hospital
- ◆ Specialist in Endocrinology and Nutrition at Hospital 12 de Octubre and Hospital de Getafe
- ◆ Doctorate in Medicine from the Autonomous University of Madrid.
- ◆ Specialty in Endocrinology and Nutrition via MIR at the University Hospital of Getafe
- ◆ Master's Degree in Bases for the Care and Education of People with Diabetes at the University of Barcelona
- ◆ Diploma in the Treatment of Type II Diabetes Mellitus: Future experts in diabetes at the Autonomous University of Barcelona
- ◆ Online Master's in Clinical Nutrition in Medicine at the CEU-Cardenal Herrera University

Dr. Álvarez Gómez, Esther

- ◆ Area Specialist at the San José Hospital in Teruel
- ◆ Residence of Geriatrics Speliacity at Nuestra Señora de Gracia Hospital
- ◆ Graduated in Medicine from the Complutense University of Madrid
- ◆ Master's Degree in Bioethics at the University of La Rioja
- ◆ Master's Degree in Palliative Care at CEU, Cardenal Herrera University

Dr. Cuenca Abarca, Ana

- ◆ Attending Physician of Internal Medicine at El Escorial Hospital
- ◆ Medical Specialist in Internal Medicine at Puerta de Hierro University Hospital
- ◆ Clinical Teaching Collaborator for the Francisco de Vitoria University
- ◆ Medical Degree from the University of Castilla-La Mancha 2003 - 2009
- ◆ PhD in Medicine and Surgery from the Autonomous University of Madrid.

04

Structure and Content

TECH employs the most effective pedagogical methodology in its programs, *Relearning*. Thanks to this, the specialist progresses in a natural way throughout the degree, with a continuous reiteration of the most relevant concepts. In this way, in addition to lightening the teaching load, more time is gained to devote to the numerous complementary readings and reinforcement exercises that reinforce the specialist's update.



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The virtual classroom will be available 24 hours a day, giving you the option to download the syllabus to study it from another device"

Module 1. Hypothalamus, Pituitary Gland and Autoimmune Pathology

- 1.1. Endocrinology
 - 1.1.1. Types of Hormones
 - 1.1.2. Synthesis, Processing and Degradation of Hormones
 - 1.1.3. Hormone Receptors
 - 1.1.4. Regulatory Systems
 - 1.1.4. Endocrine Autoimmunity
 - 1.1.6. Genetic Bases of Endocrine Diseases
- 1.2. Endocrine Pathophysiology
 - 1.2.1. Biosynthesis Disorders
 - 1.2.2. Secretion Disorders
 - 1.2.3. Transportation Disorders
 - 1.2.4. Action Disorders
 - 1.2.5. Regulatory Disorders
 - 1.2.6. Autonomous Hormone Production
- 1.3. Metabolism, Hormones and Coenzymes
 - 1.3.1. Nutrients
 - 1.3.2. Glucose Pathways
 - 1.3.3. Lipids
 - 1.3.4. Proteins
 - 1.3.5. Energy Procurement and Use
 - 1.3.6. Specific Metabolic Peculiarities
- 1.4. Hypothalamic and Pituitary Physiology
- 1.5. Hypopituitarism
- 1.6. Pineal Gland Pathology
- 1.7. Pituitary Tumor Syndromes
- 1.8. Inadequate ADH Secretion
- 1.9. Central Diabetes Insipidus
- 1.10. Autoimmune Polyglandular Syndromes
 - 1.10.1. Type I Autoimmune Polyglandular Autoimmune Syndrome
 - 1.10.2. Type II Autoimmune Polyglandular Autoimmune Syndrome





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The quality of the teaching team is reflected in all the syllabus and materials provided, of great medical precision and completeness”

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 Autoimmune Hypothalamus, Pituitary Gland and Pathology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This program will allow you to obtain your **Postgraduate Certificate in Hypothalamus, Pituitary Gland and Autoimmune Pathology** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Hypothalamus, Pituitary Gland and Autoimmune Pathology**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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