



## Postgraduate Diploma

Sleep Disorders, Headaches, Neuralgias, and Epilepsy

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Accreditation: 24 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-sleep-disorders-headaches-neuralgias-epilepsy

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# 01 Introduction

Some of the most common diagnostic situations in the neurological area in first and second line care refer to headaches, neuralgias, sleep disorders and epilepsies. The anamnesis of these situations, the first step for an adequate diagnosis, needs the support of the most updated and precise knowledge. In this complete program we offer you, gathered in an adequate, practical and efficient training, the latest advances in this area of medical intervention.



## tech 06 | Introduction

Although Neurological Diagnosis is now made with greater certainty than in past decades, this accuracy has undoubtedly been helped by the advent of increasingly sophisticated Diagnostic Research Techniques. These advances involve new knowledge and scientific developments fostered by incessant research.

Non-specialized medical professionals need access to the necessary knowledge in this field, even if they are not specialists in this field of work, in order to be able to act efficiently. However, accessing the necessary knowledge in this field and keeping up to date in this field can become incompatible with professional and personal Life. On the other hand, the professional in this specialty needs to find ways of updating their knowledge that is compatible with their personal and professional Life.

This program has been created to provide an efficient response to this need: it focuses on real healthcare conditions, is eminently practical, and does not go beyond what is essential in complex topics with little clinical repercussion.

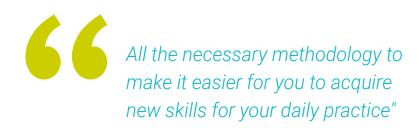
The field of Neurology is wide, complex, and extensive. The program will guide students so that they can globally, in a balanced and staggered manner, consider all the methodology required for the basic mastery of the specialty at the corresponding level.

Focused on the real context in which non-specialist physicians work and their diagnostic and care needs, this program in Neurology Update will develop the truly necessary knowledge in first or second level care, avoiding dispersion in the learning effort.

The program aims to train with rigor, teach with precision and provide ways of improvement so that the student will be able to lead realistic assistance and teaching programs in the specific area of his or her professional competencies.

The Postgraduate Diploma in Sleep Disorders, Headaches, Neuralgias, and Epilepsy contains the most complete and up-to-date scientific program on the market. The most important features include:

- A large number of case studies presented by experts
- · Graphic, schematic, and highly practical contents
- The latest developments and cutting-edge advances in this field
- Practical exercises where the self-evaluation process can be carried out to improve learning
- Innovative and highly efficient 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





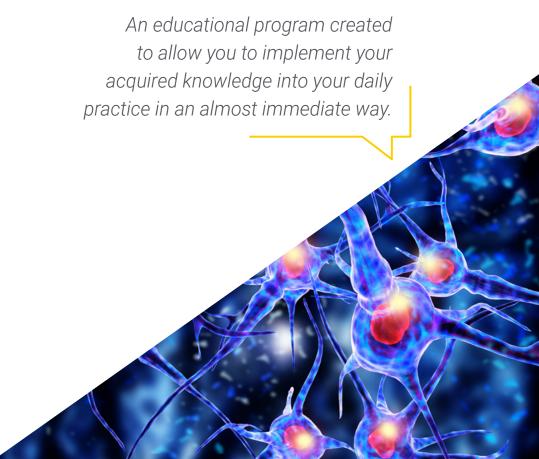
The latest advances in Sleep Disorders compiled in a highly efficient Postgraduate Diploma, which will optimize your efforts with the best results"

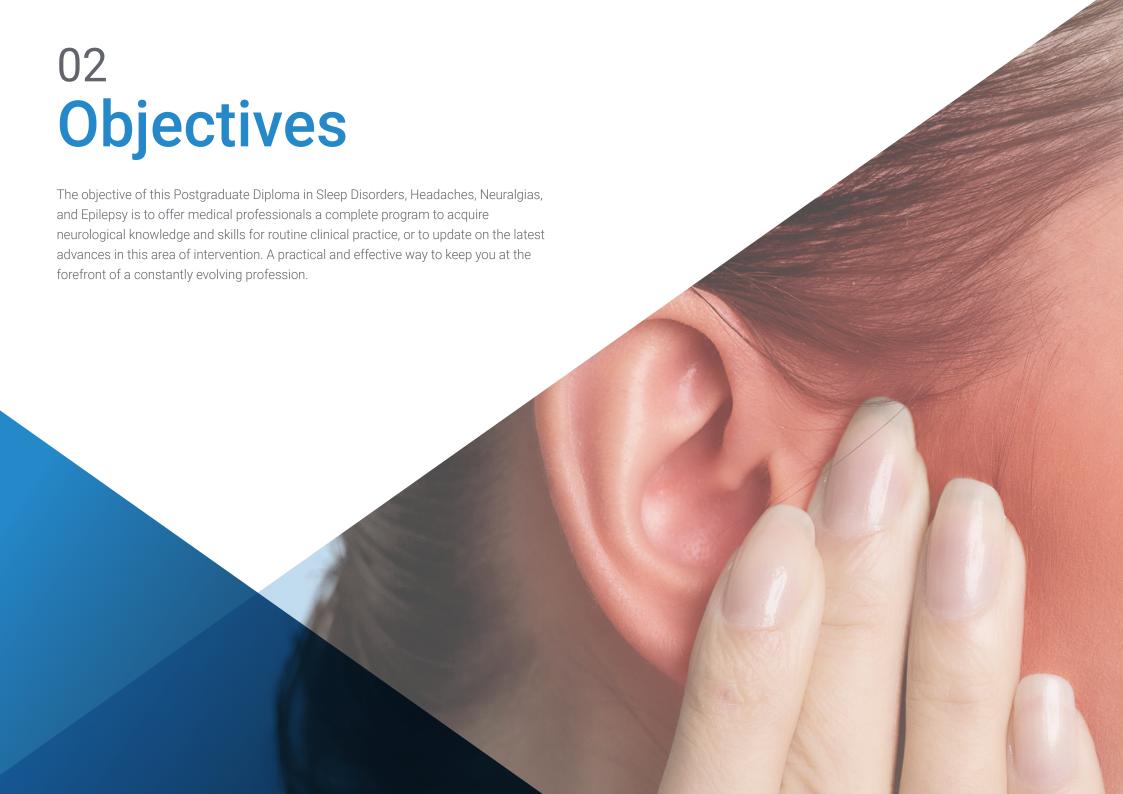
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 education programmed to learn 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 students will be assisted by an innovative interactive video system created by renowned and experienced experts.

All the necessary methodology for the most effective medical intervention in the field of neurology, in a specific and concrete Postgraduate Diploma.







## tech 10 | Objectives

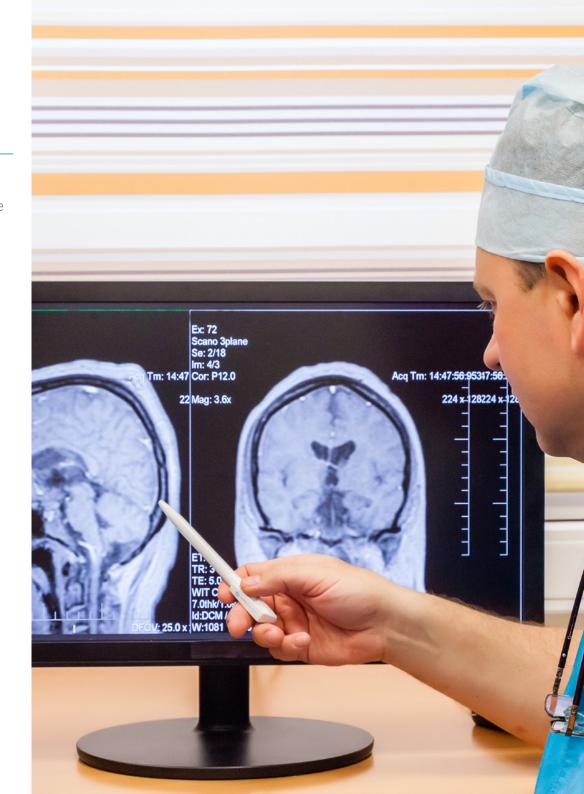


## **General Objectives**

- Acquire the neurological skills and knowledge necessary for routine clinical practice in the non-specialist practice
- Learn about the latest updates and advances in clinical neurology



You will have at your disposal a syllabus widely nourished with audiovisual resources, so that you will get a more immersive experience"





## Module 1. Diagnostic Methodology: Clinical Localization and Clinical Research Explorations in Neurology

- Know the hierarchical organization of neuroanatomy and neurophysiology in order to facilitate clinical exploration
- Recognize the rigorousness of classical neurological examination procedures
- Recognize syndromic diagnosis as the basis for understanding neurological diseases
- Recognize the limited role of complementary examinations

# Module 2. Trauma of the Nervous System. Neuro-oncology: Tumors and Paraneoplastic and Cerebellar Syndromes. Neurocutaneous Syndromes and Neurodevelopmental Disorders

- Make a correct neurological assessment of polytraumatized patients
- Recognize the conditions requiring urgent neurosurgery
- Learn to diagnose malformations and fundamental neurodevelopmental disorders
- Acquire training and basic skills in the management of Neuro-oncological patients

### Module 3. Sleep Disorders. Alterations in the Level of Consciousness

- Learn that sleep disorders are multidisciplinary in nature and require a cross-cutting approach
- Learn that insomnia is not treated with sleeping "pills alone" and their use is often a problem in itself
- Learn that snoring is a problem that must be carefully assessed to rule out OSAHS
- Learn that stupor and coma are states in which the brain is highly vulnerable

### Module 4. Epilepsies and Epileptic Seizures

- Recognize what is and what is not Epilepsy
- Distinguish between Idiopathic, Cryptogenic, or Secondary Seizures
- Identify the diagnostic approach to seizures
- Perform treatments for most seizures: "treat epilepsy"
- Refer refractory seizures after reasonably investigating the true cause of the refractoriness





### **International Guest Director**

Doctor David Simpson is a renowned physician specializing in Neurology at Mount Sinai Hospital in New York. Here, he has served as Director of the Department of Neurology as well as Director of the Division of Neuromuscular Diseases. He has also served as Director of the Clinical Neurophysiology Laboratories and as Director of the Neuro-AIDS Program. In this way, he has shown a particular interest in innovative therapies, such as the use of botulinum toxin and the capsaicin patch, with the aim of improving the quality of life of his patients.

He has also played a leading role in numerous clinical studies, leading research that has demonstrated the efficacy of the high-concentration capsaicin patch in the treatment of Peripheral Neuropathic Pain. He has also pioneered placebo-controlled studies that have confirmed the safety and effectiveness of botulinum toxin in treating Post-Stroke Spasticity. In addition, his research on botulinum toxin injection for the treatment of various neurological conditions has been instrumental in improving the techniques applied by practitioners.

Internationally, he has chaired panels of the American Academy of Neurology, developing guidelines for the use of botulinum toxin in the treatment of Movement Disorders, Pain and Autonomic Conditions. He has also been a member of other prestigious organizations, such as the American Pain Society and the American Academy of Neuromuscular and Electrodiagnostic Medicine, among others.

In addition to his clinical work, Dr. David Simpson has published more than 300 articles and has been a member of several editorial boards. His prolific academic output has included key studies in Peripheral Neuropathies and Spasticity, topics on which he has lectured worldwide, training other specialists in advanced techniques to improve neurological treatments.



## Dr. Simpson, David

- Director of the Department of Neurology at Mount Sinai Hospital, New York, United States
- Director of the Division of Neuromuscular Diseases at Mount Sinai Hospital.
- Director of the Clinical Neurophysiology Laboratories at Mount Sinai Hospital
- Director of the Neuro-AIDS Program at Mount Sinai Hospital
- Doctor of Medicine from the University of Buffalo
- Fellowship in Clinical Neurophysiology
- America's Top Doctors Award from Castle Connolly Medical



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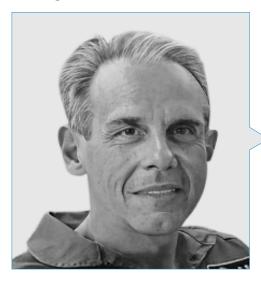
### **Guest Director**



### Dr. Pérez Martinez, David Andrés

- Head of the Neurology Department at the 12 de Octubre University Hospital
- Head of the Neurology and Neurophysiology Service at Hospital La Luz
- Head of the Neurology Section at the University Hospital Infanta Cristina
- Physician of the Hospital Central de la Cruz Roja San José y Santa Adela
- Director of Neurowikia.com Portal
- Director of the Brain Foundation
- Associate Professor of Neurology at the Complutense University of Madrid (UCM)
- University Expert in Evidence-Based Medicine, National University of Long Distance Education (UNED).
- University Specialist in Probability and Statistics in Medicine by the UNED
- President of the Madrid Association of Neurology
- Member of the Alzheimer Spain Foundation

### Management



### Dr. Martín Araguz, Antonio

- Doctor of Medicine and Neurological Surgery
- Principal investigator of the international clinical trials of the UCN
- Chief of Neurology Section, Central Hospital of the Defense Gómez Ulla of Madrid
- Head of the Neurology Service of the University Hospital of the Air
- Chief of the Neurology Unit of the Havana Medical Center
- Medical Lieutenant Colonel of the Superior Health Corps of the Ministry of Defense.
- University Professor
- Coordinator of the History of Neurology Group of the Spanish Society of Neurology
- PhD in Medicine and Surgery from the University of Alcalá de Henares
- Graduate in Medicine and Surgery from the University of Valladolid
- Specialist via MIR in Neurology at the Ramón y Cajal Hospital
- Specialist in Family and Community Medicine by the European Community
- Expert in Headache of the Neurological Sciences Unit of Madrid
- Rotations and further studies at Rush Presbyterian Hospital in Chicago and Eckerd College in St. Petersburg and Oslo
- Postgraduate Certificate in Aerospace Medicine from the Center for Instruction in Aerospace Medicine (CIMA)
- Member of more than 20 Scientific Societies, among which stand out: Spanish Society of Neurology, Madrid Association of Neurology, Spanish Association of Medical Writers and Artists

## tech 18 | Course Management

### **Professors**

### Dr. Lobato Pérez, Luis

- Psychologist and Neurologist expert in Epilepsy and Addictions.
- Neurology at the La Luz University Hospital of Madrid
- Specialist of the Psychological Attention Service (SAP), Academy of MIR Asturias.
- Specialist in Neurology at Quirónsalud Campo of Gibraltar Hospital
- General Neurology Consultation in Emergency Duty COVID-19, University Hospital 12 de Octubre, Madrid, Spain
- Neurology Area Specialist, Neurology and Clinical Neurophysiology Service, University Hospital La Paz of Madrid
- Neurophysiology on-call at the Epilepsy Monitoring Unit of the Emergency Department of Pandemic COVID-19 and at the Neuroimmunology Unit of the Neurology Department, Hospital Universitario La Paz, Madrid
- Epilepsy Monitorization Unit, Comprehensive Epilepsy Center (A. Kanner)
- Jackson Memorial Hospital, Miami University Hospital
- Clinical Teaching Collaborator at the Autonomous University of Madrid
- Degree in Medicine, University of Cadiz
- Degree in Psychology from the National Distance Education University
- Master's Degree in Epilepsy, University of Murcia
- Master's Degree in Neurology Update, Universidad CEU San Pablo
- Expert in Clinical Intervention in Addictions, Colegio Oficial de La Psicólogos de Madrid (COP)
- Postgraduate Diploma in Headaches, Francisco de Vitoria University
- Course on Neurology Update & Stroke Intensive Review at University of Miami
- Member of the Spanish Society of Neurology

### Dr. De la Morena Vicente, Maria Asunción

- Assistant Physician, from Neurology Specialist, University Hospital Infanta Cristina, Madrid
- Faculty Specialist in Neurology Area at Hospital Clínico San Carlos,
- Specialist in Neurology
- Research Project Manager, Fundación Investigación in Biomedical Hospital Clínico San Carlos, Madrid
- Medical Specialist in Neurology, private professional activity in Centro de Estudios Neurológicos, Hospitales Sanitas, Centro Médico ICE and Hospital Sanitas La Moraleja
- Collaborator in Practical Teaching in the Department of Medicine of the Complutense University of Madrid (UCM)
- Degree in Medicine and Surgery from the Universidad Autónoma de Madrid (UAM).
- Doctorate courses in Neurosciences by the Faculty of Medicine of the UCM
- Specialty in Neurology via MIR at the Clinical Hospital San Carlos, Madrid
- Specific Training Program in Epilepsy of the Spanish Society of Neurology, carried out at the Epilepsy Unit of the Hospital Clinic of Barcelona
- Member of: Spanish Society of Neurology, Spanish Society of Epilepsy, Madrid Association of Neurology, Research Committee at the University Hospital Infanta Cristina and Innovation Committee for the Institute of Health Research at the University Hospital Puerta de Hierro Majadahonda

### Dr. Toledo Alfocea, Daniel

- Specialist in Neurology and Cerebrovascular Diseases
- Neurology Specialist, General Neurology Consultation, General Neurology Ward, Stroke Unit and Headache Consultation, University Hospital 12 de Octubre, Madrid
- Neurology specialist, general neurology ward and cognitive impairment consultation, Hospital Clínico San Carlos, Madrid
- · Resident in Neurology, San Carlos Clinical in Hospital, Madrid
- Member of the organizing committee of the conference: *Health Cultures "Professionals and patients: anthropological perspectives"*, Miguel Hernández University of Elche
- Treasurer at the XXX National Congress of Medical Students, organized by the Miguel Hernández University of Elche
- Degree in Medicine, Faculty of Medicine from the University of Miguel Hernández de Elche
- Diploma in Headaches, Francisco de Vitoria University
- First multidisciplinary meeting on headaches of the CAM, Hospital Universitario Clínico San Carlos
- Diagnostic Imaging Simulation Program in Dementia, TMC Academy
- Rotation in neurootology at the Royal National ENT Hospital and National Hospital for Neurology and Neurosurgery, London

### Dr. Puente Muñóz, Ana Isabel

- Associate Chief of the Neurophysiology Service at the La Luz Hospital Clinic
- Head of the Clinical Neurophysiology Unit at the Central University Hospital of the Red Cross San José and Santa Adela
- Coordinator of the Sleep and Electroencephalography Unit at Hospital Quirónsalud Sur
- Coordinator of the Sleep Unit at the Sanitas La Moraleja University Hospital
- Resident Medical Intern in Neurophysiology at the San Carlos Clinical Hospital
- Author and Co-author of scientific articles and books related to her specialty
- Speaker at numerous congresses on Clinical Neurophysiology



Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"





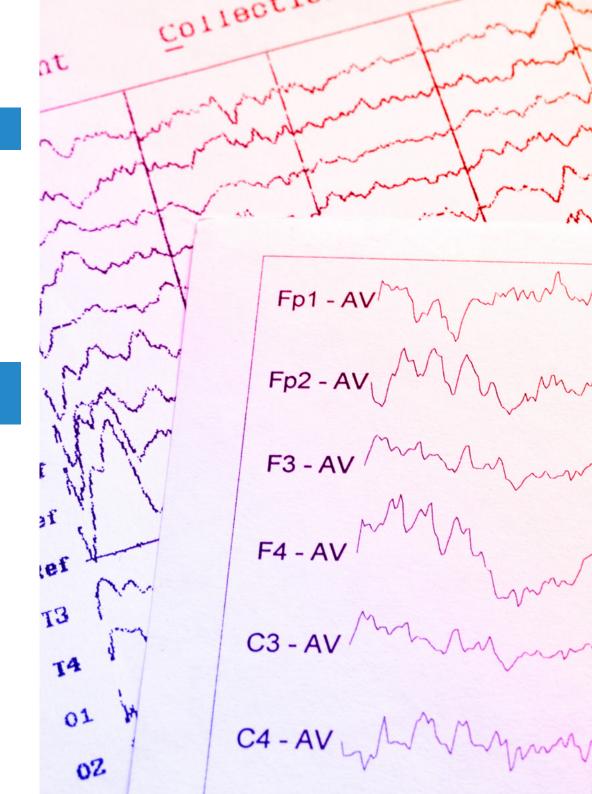
## tech 22 | Structure and Content

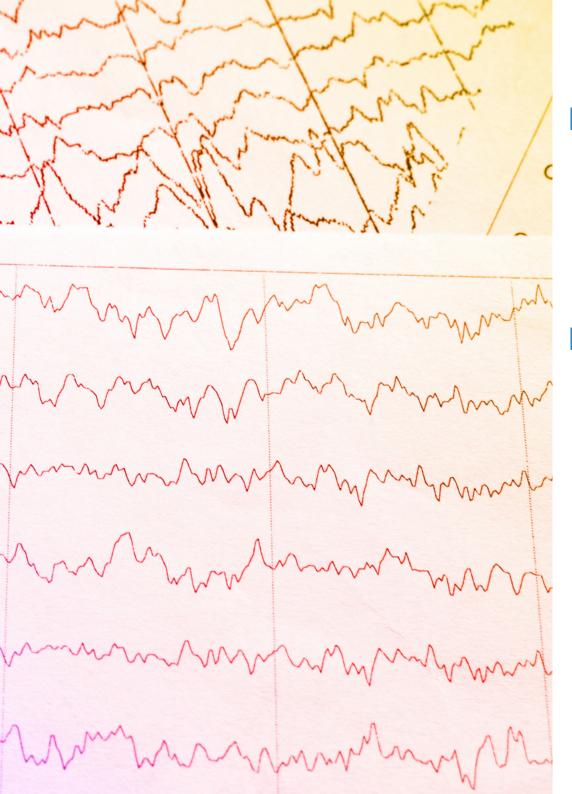
## **Module 1.** Diagnostic Methodology: Clinical Localization and Explorations in Clinical Research in Neurology

- 1.1. General Principles of Neurological Topography and Semiology
- 1.2. Clinical Localization of the Cerebral Hemispheres. Aphasia, Apraxia, Agnosia, and Other Disorders of Higher Cortical Functions of the Human Brain
- 1.3. Posterior Fossa Syndromes: Cerebellum and Brainstem
- 1.4. Cranial Nerves and Basic Principles of Neuro-Ophthalmology
- 1.5. Spinal Cord Syndromes
- 1.6. Explorations for Clinical Neurological Research
- 1.7. CSF, Laboratory, and Genetic Studies
- 1.8. Neuroradiology. Radioisotopic Imaging
- 1.9. Clinical neurophysiology
- 1.10. Neuropathology

# **Module 2.** Trauma of the Nervous System. Neuro-oncology: Tumors and Paraneoplastic and Cerebellar Syndromes. Neurocutaneous Syndromes and Neurodevelopmental Disorders

- 2.1. Neurotraumatology: Brain and Spinal Trauma
- 2.2. Intracranial Tumors
- 2.3. Spinal Tumors
- 2.4. Metastases. Paraneoplastic and Cerebellar Syndromes
- 2.5. Malformations and Familial Syndromes: Neural Tube Defects, Spina Bifida, Chiari, Dandy Walker, Lhermitte-Duclos Agenesis of the Corpus Callosum and Septum Pellucidum
- 2.6. Neuronal Migration Disorders, Heterotopias Arachnoid Cysts, Porencephaly, Hydrocephalus.
- 2.7. Neurocutaneous Syndromes
- 2.8. Von Recklinghausen's Neurofibromatosis
- 2.9. Bourneville's Disease. Other Neurocutaneous Syndromes and Derivatives
- 2.10. Other Neurodevelopment Disorders





### Structure and Content | 23 tech

### Module 3. Sleep Disorders Alterations in the Level of Consciousness

- 3.1. Sleep Medicine
- 3.2. Insomnia
- 3.3. Sleep-related Respiratory Disturbances and their Neurological Repercussions
- 3.4. Hypersomnias
- 3.5. Circadian Rhythm Disturbances
- 3.6. Parasomnias and Other Sleep Disorders
- 3.7. Abnormal Movements Related to Sleep. Bruxism
- 3.8. Delirium, Acute Confusional Syndrome
- 3.9. Stupor and Coma
- 3.10. Syncope

### Module 4. Epilepsies and Epileptic Seizures

- 4.1. Definition and Classification. Types of Seizures and Types of Epilepsy
- 4.2. Partial Seizures (Focal or Local)
- 4.3. Generalized Seizures
- 4.4. Unclassifiable Crises Pseudo-Crisis
- 4.5. Etiology of Epilepsy
- 4.6. Epilepsy Research (I): EEG
- 4.7. Epilepsy Research (II): m-EEG, Video-EEG, Invasive EEG
- 4.8. Epilepsy Research (III): SPECT, PET, MRI, and Specific Neuroimaging Protocols for Epilepsy Diagnosis
- 4.9. Medical Treatment. Epilepsy Surgery
- 4.10. Status Epilepticus





## tech 26 | 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:

- 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 | 29 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.

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.



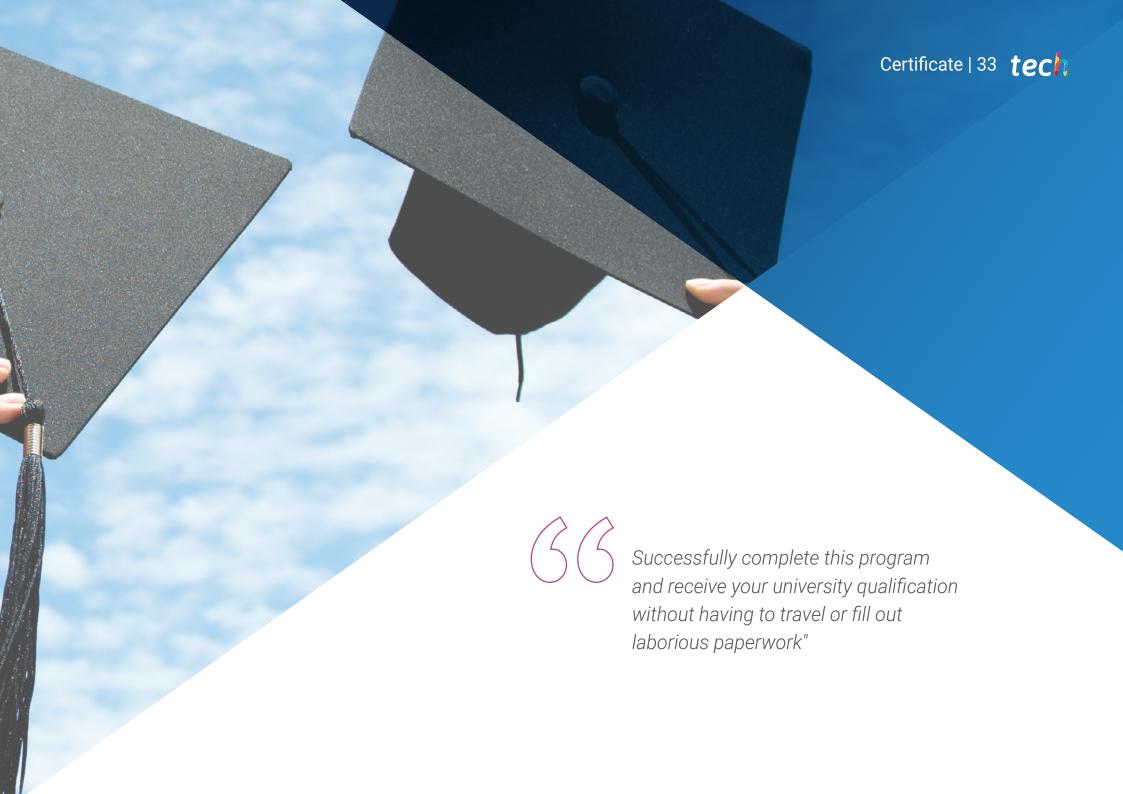
#### **Quick Action Guides**

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 34 | Certificate

This private qualification will allow you to obtain a **Postgraduate Diploma in Sleep Disorders, Headaches, Neuralgias, and Epilepsy** 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** private qualification 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 Diploma in Sleep Disorders, Headaches, Neuralgias, and Epilepsy

Modality: online

Duration: 6 months

Accreditation: 24 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

## Postgraduate Diploma in Sleep Disorders, Headaches, Neuralgias, and Epilepsy

This is a private qualification of 720 hours of duration equivalent to 24 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.

health confidence people

education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment



## Postgraduate Diploma

Sleep Disorders, Headaches, Neuralgias, and Epilepsy

- » Modality: online
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- » Accreditation: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

