

# Professional Master's Degree

## Update on Neurology





## Professional Master's Degree Update on Neurology

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/medicine/professional-master-degree/master-update-neurology](http://www.techtitute.com/us/medicine/professional-master-degree/master-update-neurology)

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# 01

# Introduction

Neurological diagnostics has evolved exponentially in recent decades. The introduction of new and sophisticated technologies applied to this field drives and facilitates the development of research. Keeping up with this unstoppable flow of information can be a daunting task. In this program, we encourage you to enter the vanguard of this specialty, building bridges between highly specialized Neurology and the rest of Clinical Care Medicine. A program that will put you at the forefront of medical excellence.



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*The latest advances in the area of Clinical Neurology compiled in a highly efficient educational program, which will optimize your effort with the best results"*

Although neurological diagnosis is now made with greater certainty than in past decades, this accuracy has undoubtedly been facilitated 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 area of work, in order to be able to act efficiently. However, accessing the necessary knowledge in this area and keeping up to date in this area 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. This program will guide the student so that they will be able to apply all the methodology required for the basic mastery of the specialty at the corresponding level in a global, balanced and staggered manner.

Focused on the real context in which non-specialist physicians act and their diagnostic and care needs, this Professional Master's Degree in Update on Neurology will develop the knowledge that is truly necessary in a first or second level practice, avoiding dispersion in the learning effort.

The program aims to train with rigor, teach with precision and provide ways of improvement so that students are able to lead realistic assistance and teaching programs in the specific area of their professional competencies.

This **Professional Master's Degree in Update on Neurology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Development of a large number of case studies presented by experts
- ♦ Graphic, schematic, and highly practical contents
- ♦ The latest developments and cutting-edge advances in this area
- ♦ Practical exercises where the self-assessment 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



*All the necessary methodology for the non-specialist medical professional in the field of Neurology, in a specific and concrete program"*

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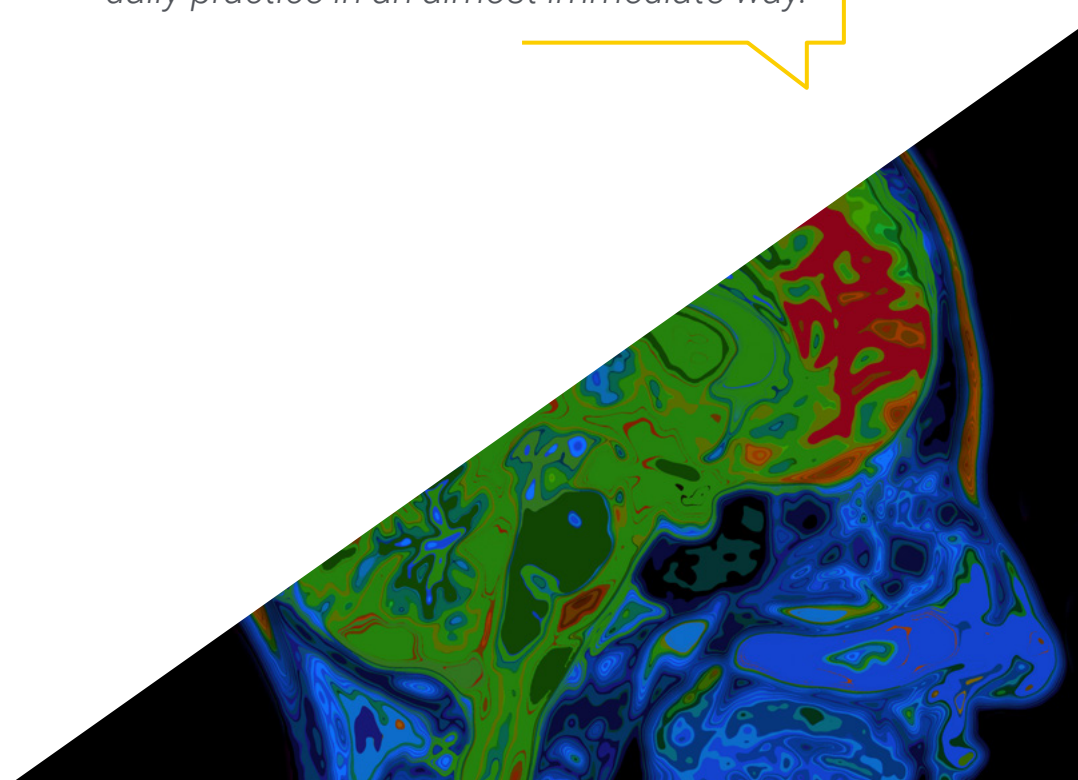
*This Professional Master's Degree may be the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Neurology, you will obtain a qualification from TECH Global University"*

The development of this course is focused on the practice of the proposed theoretical learning. Through the most effective teaching systems and proven methods imported from the most prestigious universities in the world, you will be able to acquire new knowledge in an eminently practical way. In this way, we strive to convert your efforts into real and immediate skills.

Our online system is another strength of our educational proposal. With an interactive platform, which has the advantages of the latest technological developments, we put the most interactive digital tools at your service. In this way, we can offer you a way of learning that is totally adaptable to your needs so that you can perfectly balance this program with your personal or professional life.

*Increase your visibility, excellence and professional development by updating your knowledge through this program.*

*A training program created to allow you to implement your acquired knowledge into your daily practice in an almost immediate way.*



# 02

# Objectives

The objective of this program is to offer medical professionals a complete pathway to acquire neurological knowledge, competencies and skills for routine clinical practice, or to update on the latest advances in this area of intervention. A practical and effective way to keep you at the forefront of a constantly evolving profession.





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*Our goal is simple: to help you get the most complete update in the area of Neurology in a program that is fully compatible with your work and personal obligations"*



## General Objectives

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- Acquire neurological skills and knowledge necessary for routine clinical practice in the specialized clinic
- Know the latest updates and advances in Clinical Neurology



*Take the opportunity and take the step to get up to date on the latest developments in the management of Neurology"*





## Specific Objectives

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

- ♦ To 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 explorations

### **Module 2. Upper and Lower Motor Neuron Diseases, Neuromuscular Plate, Peripheral Nerves, and Myopathies**

- ♦ Recognize peripheral nerve, neuromuscular plate and muscle diseases at a general level
- ♦ Diagnostic approach to a patient with neuropathic pain, weakness or fatigability
- ♦ Diagnose most of the systemic processes that produce peripheral nerve and muscle alterations
- ♦ Knowledge of the essential diagnostic techniques and a realistic assessment of what can be expected at this level of care

### **Module 3. Ischemic and Hemorrhagic Strokes. Other neurovascular disorders**

- ♦ Pre-stroke: efficiently managing prevention protocols and health programs for vascular risk factors
- ♦ Distinguish ischemic strokes of cardioembolic etiology from the rest and to learn efficient prophylactic guidelines for oral anticoagulation
- ♦ During stroke: recognize symptoms, be clear about what to do and, above all, what NOT to do. In addition, to know the limitations of each level of care and how to activate a Stroke Code when necessary
- ♦ After the stroke: monitoring the patient and controlling sequelae and cardiovascular risk factors in an efficient and, above all, realistic manner

### **Module 4. Neurodegenerative Diseases: Alzheimer's Disease and Parkinson's Disease. Other dementias, parkinsonisms and movement disorders. Spinocerebellar heredoataxias**

- ♦ Learn about neurodegenerative processes, which are emerging in today's society and which, in the near future, will acquire epidemic proportions with enormous associated costs
- ♦ Have the clinical skills to properly diagnose and manage Alzheimer's and Parkinson's diseases
- ♦ Know how to differentiate Alzheimer's disease from other dementias
- ♦ Know other hypo- or hyperkinetic movement disorders caused by diseases of the basal ganglia, especially dystonias

**Module 5. Trauma of the Nervous System. Neuro-oncology: paraneoplastic and cerebellar tumors and syndromes. Neurocutaneous syndromes and neurodevelopmental disorders**

- ♦ Perform correct neurological assessment of polytraumatized patients
- ♦ Recognize conditions requiring urgent neurosurgery
- ♦ Learn to diagnose malformation processes and fundamental neurodevelopmental disorders
- ♦ Acquire basic training and skills in the management of neuro-oncology patients

**Module 6. Multiple Sclerosis and Other Inflammatory and Demyelinating Disorders of the Nervous System**

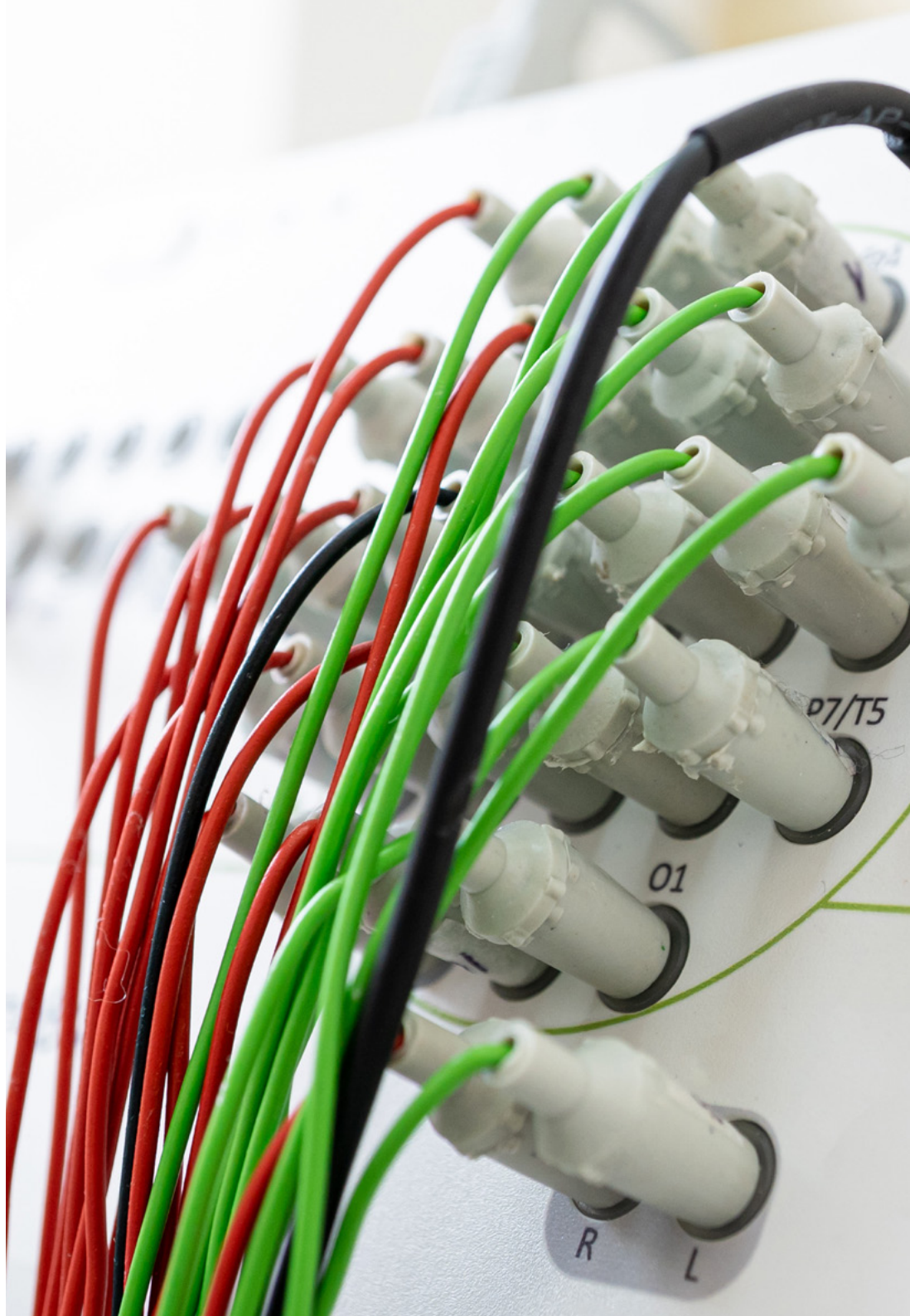
- ♦ Recognize the spatiotemporal symptoms of MS
- ♦ Learn how to clinically diagnose MS and its evolutionary forms
- ♦ Acquire skills in the recognition and treatment of outbreaks
- ♦ Establecer pautas de ayuda y apoyo para los pacientes con EM
- ♦ To know the rest of demyelinating and dysimmune processes of the CNS

**Module 7. Headaches, Neuralgias, and Craniofacial Pain**

- ♦ Learning to diagnose a primary headache
- ♦ Recognizing the warning signs of a secondary headache
- ♦ Protocolize a realistic stepwise treatment: crisis abortive and migraine prophylaxis
- ♦ Inform patients about treatments that are not useful or not rigorously proven by Evidence-Based Medicine (fake news, urban legends, fantasy and scientism)
- ♦ Diagnosing and treating craniofacial neuralgia

**Module 8. Sleep Disorders. Consciousness level disorders**

- ♦ Understand that sleep disorders are multidisciplinary in nature and require a transversal approach
- ♦ Learn that insomnia is not only treated with sleeping pills and that, many times, their use is already a problem in itself
- ♦ Know 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 in a highly vulnerable situation



### Module 9. Epilepsies and Epileptic Seizures

- ◆ Recognize what epilepsy is and what it is not
- ◆ Differentiate between idiopathic, cryptogenic or secondary seizures
- ◆ Diagnostic approach to crises
- ◆ Treatment of most seizures: "treating epilepsy" is not equivalent to "total seizure control"
- ◆ Know how to refer refractory crises after reasonably investigating the true cause of such refractoriness

### Module 10. Nervous System Infections Neurological and psychiatric aspects of systemic diseases, toxics and external agents

- ◆ Recognize the most important infectious processes of the CNS and place them in context in order to act accordingly
- ◆ Review the major neurotoxic agents to prevent nerve injury with appropriate health programs
- ◆ Review the main neurological manifestations of systemic diseases
- ◆ Know the psychiatric processes associated with neurological diseases
- ◆ Differentiate between simulation and conversion syndrome

# 03 Skills

The structure of this program has been designed in such a way that professionals will be able to understand the knowledge that provides a basis for responding to the care needs of neurological patients, thereby addressing the best way to proceed in each case. All this, thanks to a unique methodology, quality content and the support of the experts who have developed this syllabus.





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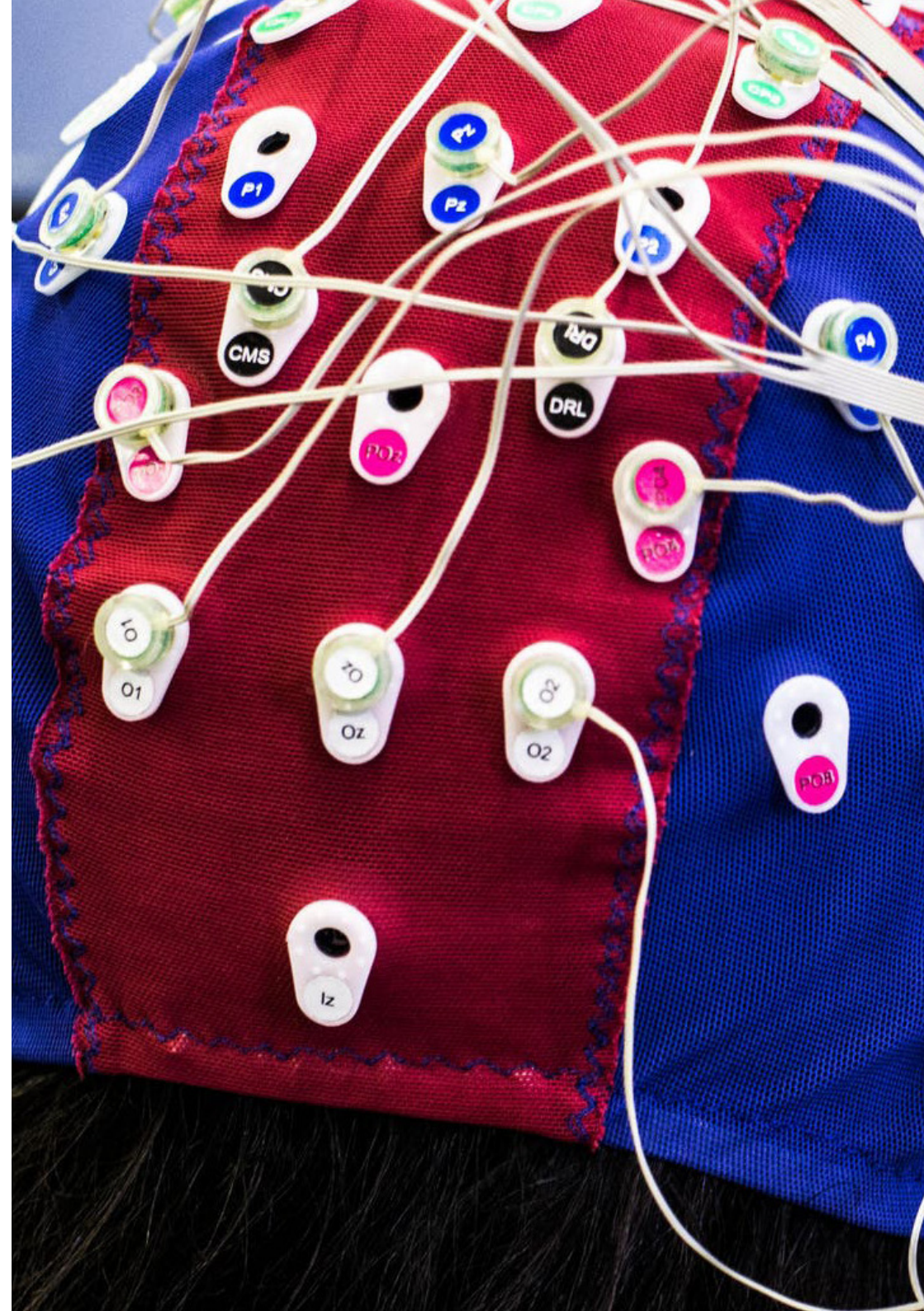
*This program will help you acquire the skills you need to excel in providing quality patient care”*



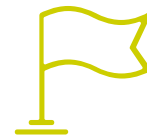
## General Skills

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- ◆ Possess and understand knowledge that provides a basis for responding to the needs of care in neurological medicine
- ◆ Students should be able to apply the knowledge acquired and have problem-solving skills in inpatient or outpatient settings
- ◆ Students should be able to integrate knowledge and face the complexity of formulating diagnoses based on assessment by functional patterns
- ◆ Students should know how to plan their care and correctly evaluate the effective implementation of care plans through nursing taxonomies of outcome criteria and medical interventions
- ◆ Students should possess the learning skills that will enable them to foster user and family participation in their care program to achieve the best health outcomes







## Specific Skills

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- ♦ Create a global and up-to-date vision of the topics presented that will allow the student to acquire useful knowledge and, at the same time, generate interest in expanding the information and discovering its application in their daily practice
- ♦ Understand the necessary knowledge in pathophysiology of neurological diseases
- ♦ Learn the symptomatology that appears throughout the disease process and anticipate possible complications that may occur
- ♦ In-depth knowledge of the most up-to-date basic medical-surgical treatments
- ♦ In-depth knowledge of diagnostic taxonomy to formulate neurological medicine diagnoses

*A unique program of specialization that will allow you to acquire superior training to develop in this field.*

03

# Course Management

This program is taught by leading specialists in Neurology. Trained in different fields of clinical care and practice, all of them have experience in teaching and research in different areas of the nervous system and with the necessary management knowledge to provide a broad, systematic and realistic vision within the complexity of this area of Neuroscience, this group of experts will accompany you throughout the training, putting their real and updated experience at your service.





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*An opportunity created for professionals who are looking for an intensive and effective course, with which to take a significant step in the practice of their profession"*

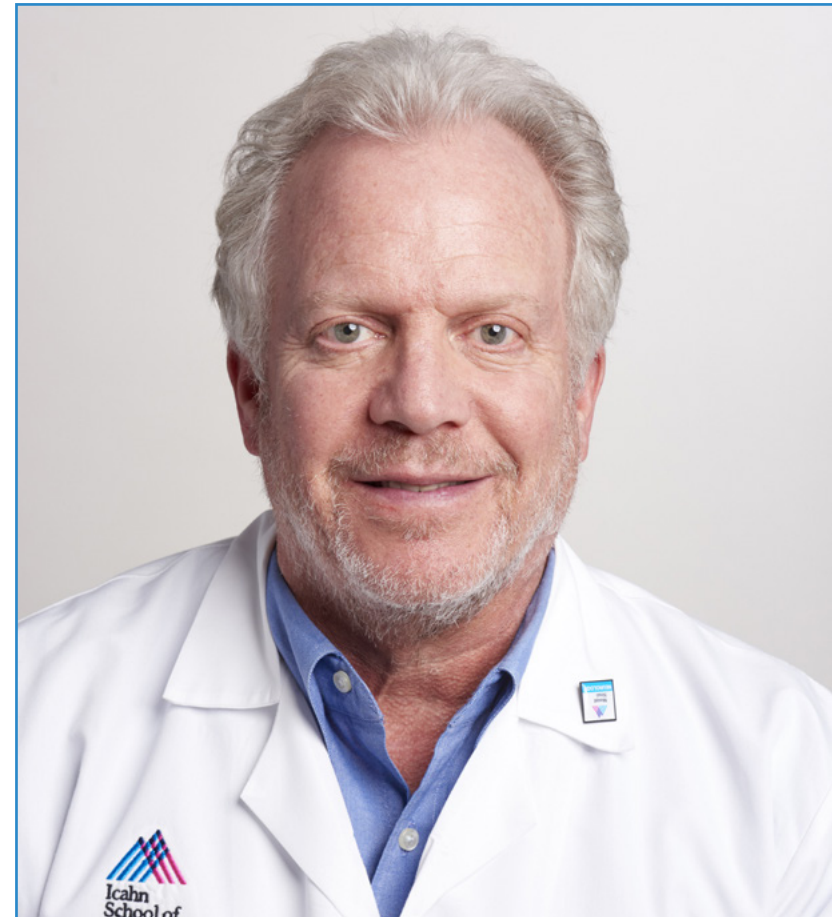
## International Guest Director

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

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

## Guest Director



### Dr. Pérez Martínez, David Andrés

- ♦ President of the Spanish Association of Neurology
- ♦ Head of Neurology Service at the 12 de Octubre University Hospital
- ♦ Associate Professor, Faculty of Medicine, Complutense University
- ♦ Head of Section, Infanta Cristina University Hospital
- ♦ Neurology, Central Hospital of the Red Cross San José and Santa Adela
- ♦ General Director of the Spanish Foundation for Neurological Diseases

## Co-Direction



### Dr. Martín Araguz, Antonio

- ♦ Doctor of Medicine and Surgery.
- ♦ Medical Specialist in Neurology. Neurological Sciences Unit of Madrid (Spain)
- ♦ Expert in the Development of the High Capacities of the Human Brain (National Geographic)
- ♦ Doctor in Art History
- ♦ Diploma in Aerospace Medicine
- ♦ Master's Degree in Astronomy and Astrophysics
- ♦ Director of First International Congress about Euroesthetics. Carlos III Research Institute CSIC (Madrid, Spain)

## Professors

### Dr. Almendral Doncel, Raquel

- ♦ Assistant Pediatric Physician with Exclusive Dedication to Neuropediatrics at the Virgen de la Salud University Hospital. Toledo
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Specialist in Family and Community Medicine at the General Hospital of Albacete
- ♦ Doctor in Medicine and Surgery at the Autonomous University of Madrid
- ♦ Specialist in Pediatrics and its Specific Areas at the University Hospital San Juan de Alicante
- ♦ International Master's Degree in Psychobiology and Cognitive Neuroscience. Autonomous University of Barcelona
- ♦ Full Member of the Spanish Society of Child Neurology
- ♦ Full Member of the Association of Neuropediatrics of Madrid and Central Spain
- ♦ Master in Pediatric Neurology and Neurodevelopment. Cardenal Herrera University
- ♦ Expert in Advances in Developmental, Learning, and Neuropsychiatric Disorders, Cardenal Herrera University
- ♦ Expert in Infectious Diseases of the Nervous System and Neurological Emergencies. Cardenal Herrera University
- ♦ University Expert in Advances in Prenatal and Neonatal Neurology and Metabolic Errors. Cardenal Herrera University
- ♦ University Expert in Advances in Motor and Paroxysmal Disorders in Pediatric Neurology. Cardenal Herrera University
- ♦ University Expert in Malformations, Chromosomal Disorders, and Neurosurgical Pathology in Pediatric Neurology. Cardenal Herrera University
- ♦ Author of the Book "The Learning Triangle". Saralejandría Editores. Castellón

### Dr. De La Morena, Asunción

- ♦ Degree in Medicine and Surgery (1989- 1995) from the Autonomous University of Madrid
- ♦ Doctorate Courses in Neurosciences, Faculty of Medicine, Complutense University of Madrid, completed in 1999 (32 credits), Obtaining the Research Sufficiency
- ♦ Specialty Neurology via MIR at the University Hospital Clínico San Carlos Madrid, Completing their training
- ♦ Infanta Cristina University Hospital since its opening. Category: Assistant Medical Specialist Neurology
- ♦ Resident Physician Neurology Date: 1996-2000 Institution: San Carlos Clinical Hospital, Madrid
- ♦ SEN Specific Training Fellow Date: 2001-2002 Institution: Barcelona Clinical Hospital
- ♦ Neurology Area Specialist Date: April-June 2004, January-March 2005 Institution: Clinical Hospital San Carlos de Madrid Date

### Dr. Domínguez Salgado, Manuel

- ♦ Doctor of Medicine. Complutense University of Madrid
- ♦ Specialist in Neurology
- ♦ Specialist in Clinical Neurophysiology
- ♦ Magister in Pediatric Neurology
- ♦ Area Specialist Physician - Central Hospital de la Defensa Gómez Ulla-Madrid, Responsible for the Epilepsy Unit and Cognitive Impairment Unit
- ♦ Head of Neurology Department - Milagrosa Hospital - Madrid
- ♦ Associate Professor of Neurology University of Alcalá de Henares

**Dr. Fe Marqués, Antonio**

- ♦ Expert in Infectious Medicine
- ♦ Specialist in Internal Medicine

**Dr. Lobato Pérez, Luis**

- ♦ Specialist in Neurology May 2016-May 2020. MIR Residency: La Paz University Hospital. Neurology and Clinical Neurophysiology Service
- ♦ July 2020 present. General Neurology Consultation. 12 de Octubre University Hospital. Emergency Duty COVID19
- ♦ May 2018-May 2020. Neurophysiology On-call with Epilepsy Monitoring Unit.
- ♦ March-April 2020. Emergency Department. COVID19 pandemic
- ♦ May-July 2020. Neuroimmunology Unit. La Paz University Hospital. Neurology Service
- ♦ Epilepsy Monitorization Unit. Comprehensive Epilepsy Center (A. Kanner)
- ♦ January-March 2020. Jackson Memorial Hospital, Miami University Hospital
- ♦ Clinical Teaching Collaborator Autonomous University of Madrid, 2016-2020. La Paz University Hospital. Autonomous University of Madrid

**Dr Moreno, Irene**

- ♦ Clinical Neurologist. Jiménez Díaz Foundation University Hospital. Puerta de Hierro University Hospital
- ♦ Research Neurologist. Puerta de Hierro Segovia de Arana Institute for Health Research
- ♦ Master's Degree in Neuroimmunology. Autonomous University of Barcelona CEMCAT
- ♦ Doctorate in Neurosciences. Autonomous University of Madrid





**Dr. Puente Muñoz, Ana Isabel**

- ♦ Degree in Medicine and Surgery from the Complutense University
- ♦ Specialist in Clinical Neurophysiology at the Clinical Hospital San Carlos of Madrid
- ♦ Professional Expert in Computer Tools in Health Research, UNED
- ♦ Head of the Clinical Neurophysiology Unit at the Central Hospital of the Red Cross in Madrid: June 2005 to Present
- ♦ Director of the Sleep Disorders area and Community Manager in the Web Portal [www.neurowikia.es](http://www.neurowikia.es). Start January 2011 to Present
- ♦ Coordinator of the Sleep and Electroencephalography Unit at Quironsalud Sur Hospital: From October 2019 to Present

**Dr. Ruiz Ezquerro, Juan José**

- ♦ Head of Neurology Service. Zamora Health Care Complex
- ♦ Degree in Medicine from the University of Zaragoza
- ♦ Specialist in Neurology, MIR, Salamanca
- ♦ Master Professor in Epilepsy, University of Murcia
- ♦ Master Professor in Clinical Neuropsychology University of León- IAEU

**Dr. Ruiz López, Marta**

- ♦ Degree in Medicine from the University of Salamanca
- ♦ Specialist in Neurology
- ♦ Master in Movement Disorders. 4th Edition. University of Murcia NeurocampusViguera Editores
- ♦ Certification in Ultrasonography by the Spanish Society of Neurology.
- ♦ Fellowship by the American Parkinson Foundation for fellowship in Research at International Center

- ♦ Publications: Bally J, Rohani M, RuizLopez M. Patient adjusted Deep Brain Stimulation Programming is Time Saving in Dystonia Patients. J Neurol. 2019 Oct;266(10):24232429
- ♦ Research: Phase 3 Study to Examine the Efficacy, Safety and Tolerability of APL130277 (Sublingual Apomorphine) for the Acute Treatment of OFF Episodes in Patients with Parkinson's Disease.CTH301. Cynapsus Therapeutics

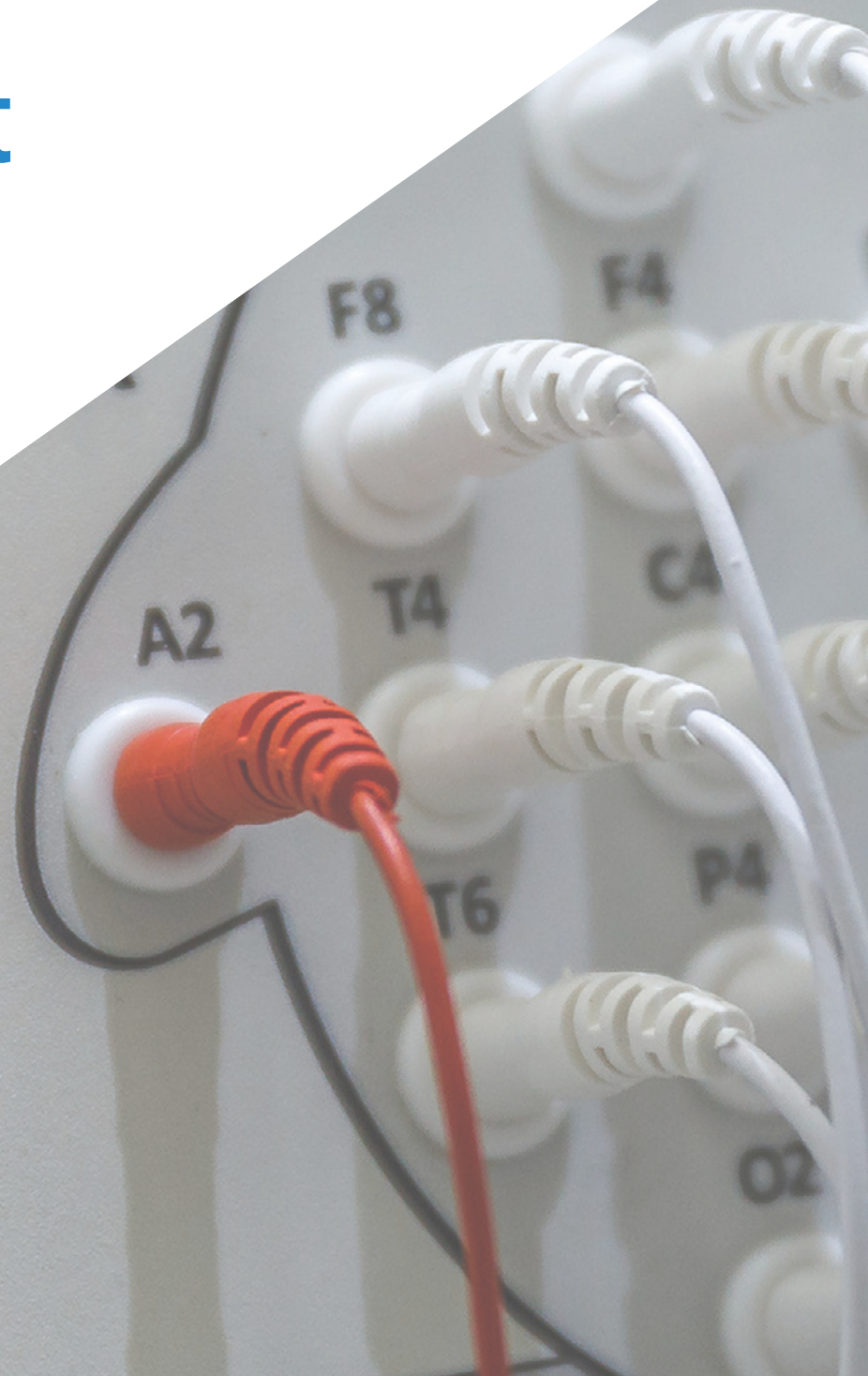
**Dr. Toledo Alfocea, Daniel**

- ♦ Degree in Medicine, Faculty of Medicine, Miguel Hernández University, Alicante, Spain
- ♦ Neurology Specialist (General Neurology Consultation, General Neurology Ward, and Stroke Unit) 12 de Octubre University Hospital, Madrid. October/2018 - Present
- ♦ Neurology Specialist (general Neurology ward and Cognitive Impairment Consultation) Clinical Hospital San Carlos, Madrid. June/2018 - July/2018
- ♦ Resident in Neurology Clinical Hospital San Carlos, Madrid. May/2014 - May/2018
- ♦ Expert Degree in Headaches from the Francisco de Vitoria University
- ♦ Diagnostic Imaging Simulation Program in Dementia. TMC Academy
- ♦ First Multidisciplinary Meeting on Headaches of the CAM (San Carlos Clinical University Hospital)

# 04

## Structure and Content

The structure of the contents has been designed by a team of professionals, who are aware of the current relevance of training in order to advance in the labor market with security and competitiveness, and to be able to practice your profession with the excellence that only the best training allows.



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*This program contains the most complete and up-to-date scientific program on the market"*

### 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. Diseases of Upper and Lower Motor Neurons, Neuromuscular Plate, Peripheral Nerves, and Myopathies

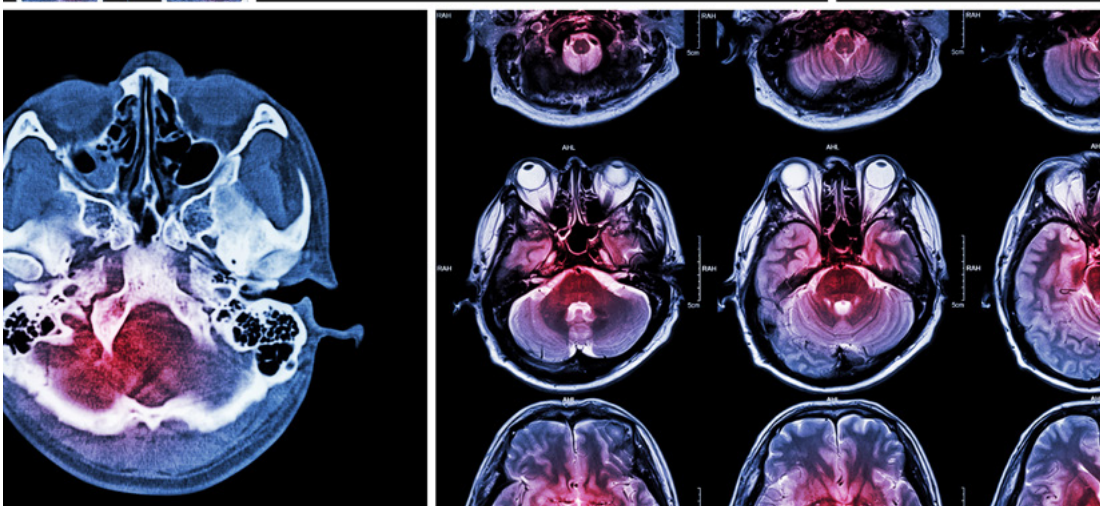
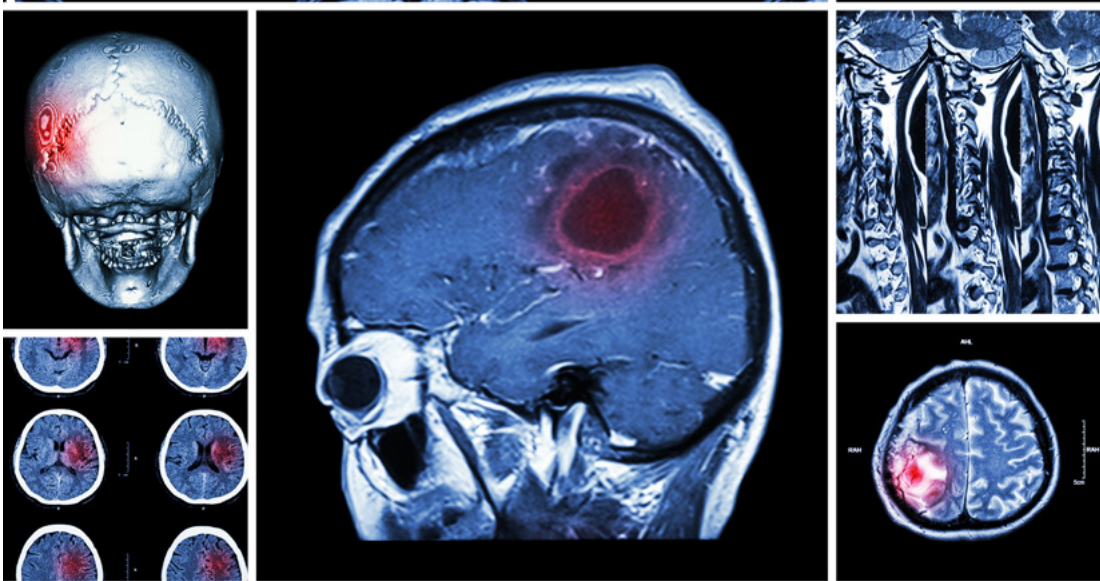
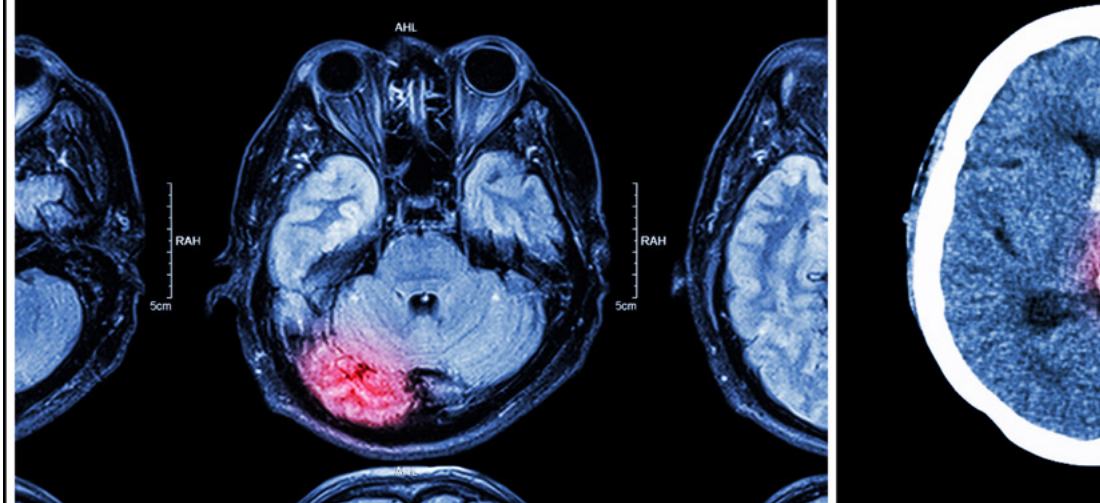
- 2.1. Pathogenesis of Upper and Lower Motor Neuron Diseases
- 2.2. Classical Forms (ALS)
- 2.3. Variant and Genetic Forms
- 2.4. Peripheral Neuropathies
- 2.5. Genetically Determined Neuropathies
- 2.6. Neuropathies in Genetically Determined Systemic Diseases
- 2.7. Genetic Myopathies
- 2.8. Acquired Myopathies
- 2.9. Myasthenia Gravis
- 2.10. Other Forms of Neuromuscular Transmission Disorders

### Module 3. Ischemic and Hemorrhagic Strokes. Other Neurovascular Disorders

- 3.1. Ischemia and Cerebral Infarction: Syndromes in Ischemic Stroke
- 3.2. Ischemic Strokes: Neurovascular Anatomy, Classification, and Clinical Assessment
- 3.3. Atherosclerosis, Cardioembolic Stroke, Lacunar Syndromes, and Others
- 3.4. Vascular Dementia
- 3.5. Cerebral Hemorrhage. Hemorrhagic Strokes
- 3.6. Aneurysms, Vascular Malformations, Cerebral Amyloid Angiopathy
- 3.7. Cerebral Venous Thrombosis
- 3.8. Hypertensive and Anoxic Encephalopathies
- 3.9. Coagulation and Nervous System Disorders
- 3.10. Endovascular Therapy and Fibrinolysis Stroke Units
- 3.11. Neurorehabilitation Management of Sequelae and Control of Spasticity

### Module 4. Neurodegenerative Diseases: Alzheimer's Disease and Parkinson's Disease. Other Dementias, Parkinsonisms, and Movement Disorders. Spinocerebellar Heredoataxias

- 4.1. Alzheimer's Disease: Macroscopic and Microscopic Findings
- 4.2. Alzheimer's Disease: Clinical Findings
- 4.3. Research and Treatment of Degenerative Dementias
- 4.4. Dementia and Lewy Bodies
- 4.5. Frontotemporal Dementia, Lobar Atrophies, Tauopathies, and Frontotemporal Lobar Degeneration with Immunoreactive Changes
- 4.6. Parkinson's Disease
- 4.7. Other Parkinsonisms
- 4.8. Primary and Secondary Dystonia
- 4.9. Choreic and Ballistic Syndromes
- 4.10. Spinocerebellar Heredoataxias



## Module 5. Trauma of the Nervous System. Neuro-oncology: Tumors and Paraneoplastic and Cerebellar Syndromes. Neurocutaneous Syndromes and Neurodevelopmental Disorders

- 5.1. Neurotraumatology: Brain and Spinal Trauma
- 5.2. Intracranial Tumors
- 5.3. Spinal Tumors
- 5.4. Metastases. Paraneoplastic and Cerebellar Syndromes
- 5.5. Malformations and Familial Syndromes: Neural Tube Defects, Spina Bifida, Chiari, DandyWalker, and Lhermitte-Duclos Malformations. Agenesis of the Corpus Callosum and Septum Pellucidum
- 5.6. Neuronal Migration Disorders, Heterotopias, Arachnoid Cysts, Porencephaly, and Hydrocephalias
- 5.7. Neurocutaneous Syndromes
- 5.8. Von Recklinghausen's Neurofibromatosis
- 5.9. Bourneville's Disease. Other Neurocutaneous Syndromes and Derivatives.
- 5.10. Other Neurodevelopment Disorders

## Module 6. Multiple Sclerosis and Other Inflammatory and Demyelinating Disorders of the Nervous System

- 6.1. Multiple Sclerosis (MS) and Other Demyelinating Processes: Classification
- 6.2. MS Neuropathology
- 6.3. MS Pathophysiology
- 6.4. Clinical Aspects and Evolutionary Forms of MS
- 6.5. MS Diagnostic Investigation
- 6.6. MS Treatment
- 6.7. Devic's Neuromyelitis Optica, Baló's Disease, and Schilder's Disease
- 6.8. Acute Disseminated Encephalomyelitis
- 6.9. Leukodystrophies: Lysosomal and Peroxisomal Disorders
- 6.10. Other White Matter Disorders

## Module 7. Headaches, Neuralgias and Craniofacial Pain

- 7.1. Classification of Headaches and Cranial Neuralgias: Primary and Secondary Headaches
- 7.2. Migraine and Subtypes
- 7.3. Tension-Type Headache
- 7.4. Trigeminal Autonomic Cephalalgia (*Cluster Headache*), Paroxysmal Hemicrania, Continuous Hemicrania, SUNA, and SUNCT
- 7.5. Other Primary Headaches
- 7.6. Idiopathic Trigeminal Neuralgia
- 7.7. Glossopharyngeal Neuralgia
- 7.8. Arnold's and Trochlear Neuralgia
- 7.9. Postherpetic Neuralgia
- 7.10. Secondary Neuralgias: Sinusitis, Glaucoma, Giant Cell Arteritis, Idiopathic Intracranial Hypertension, Intracranial Hypotension Syndrome, and Others

## Module 8. Sleep Disorders. Consciousness Level Disorders

- 8.1. Sleep Medicine
- 8.2. Insomnia
- 8.3. Sleep-Related Respiratory Disorders and their Neurological Repercussions
- 8.4. Hypersomnias
- 8.5. Circadian Rhythm Disturbances
- 8.6. Parasomnias and Other Sleep Disorders
- 8.7. Abnormal Movements Related to Sleep. Bruxism
- 8.8. Delirium, Acute Confusional Syndrome.
- 8.9. Stupor and Coma
- 8.1. Syncope



## Module 9. Epilepsies and Epileptic Seizures

- 9.1. Definition and Classification. Types of Seizures and Types of Epilepsy
- 9.2. Partial Seizures (Focal or Local)
- 9.3. Generalized Seizures
- 9.4. Unclassifiable Crises Pseudo-Crisis
- 9.5. Etiology of Epilepsy
- 9.6. Epilepsy Investigation (1): EEG
- 9.7. Epilepsy Investigation (2): M-EEG, VideoEEG, Invasive EEG
- 9.8. Epilepsy Investigation (3): SPECT, PET, MRI and Specific Neuroimaging Protocols for Epilepsy Diagnosis
- 9.9. Medical Treatment. Epilepsy Surgery
- 9.10. Status Epilepticus

## Module 10. Nervous System Infections Neurological and Psychiatric Aspects of Systemic Diseases, Toxics, and External Agents

- 10.1. Infections the Nervous System
- 10.2. Effects of Radiation, Drugs and Alcohol on the Nervous System
- 10.3. Action of Physical Agents, Neurotoxicants and Nutritional Deficits on the Nervous System
- 10.4. Neurology of Endocrine Diseases
- 10.5. Vasculitis, Connective Tissue Diseases and the Nervous System
- 10.6. Psychiatric Aspects of Neurological Diseases: Conversion, Behavioral, and Personality Disorders Depression and Psychosis in Neurological Practice
- 10.7. Other Neurological Disorders in Systemic Diseases
- 10.8. Inborn Errors of Metabolism of the Nervous System
- 10.9. Mitochondrial and Ion Channel Disorders of the Nervous System
- 10.10. Neuro-COVID



*A unique, key, and decisive educational experience to boost your professional development"*

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.

“

*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 TECH Master's Degree in Update in Neurology guarantees students, in addition to the most rigorous and up-to-date education, access to a TECH Master's Degree 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 private qualification will allow you to obtain a **Professional Master's Degree diploma in Update on Neurology** 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.

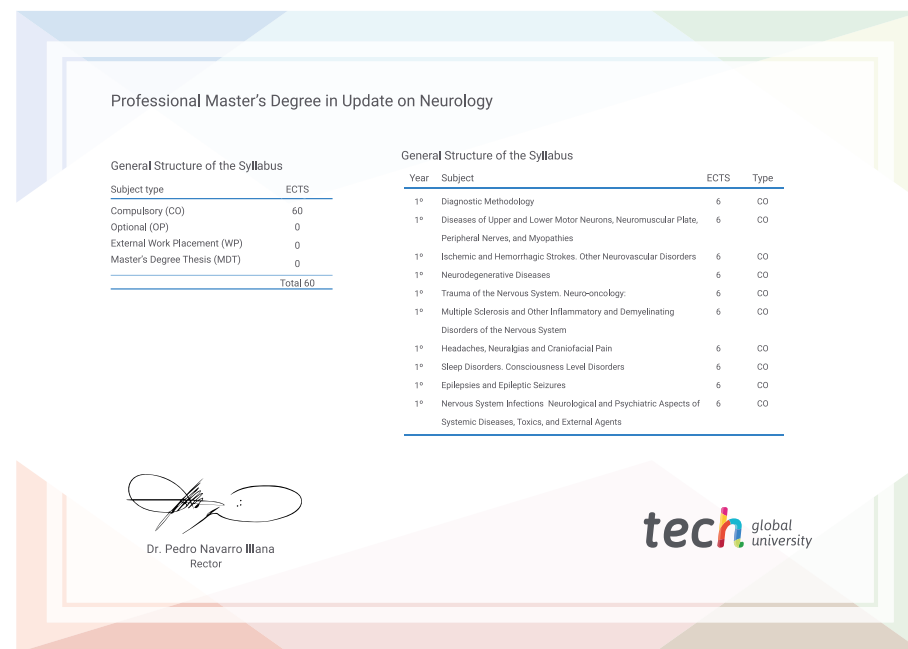
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Professional Master's Degree in Update on Neurology**

Modality: **online**

Duration: **12 months**

Accreditation: **60 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.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
online training  
development languages  
virtual classroom



## Professional Master's Degree

### Update on Neurology

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree

## Update on Neurology

