Postgraduate Diploma
Neurodegenerative Pathologies

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Postgraduate Diploma
Neurodegenerative Pathologies

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

Website: www.techtitute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-neurodegenerative-pathologies

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01

Introduction

The approach to Neurodegenerative Pathologies requires the professional to master all the skills and up-to-date knowledge that are constantly emerging in this field. Parkinson's Disease, Motor Neuron Disease or Neurodegenerative Dementias are some of the conditions in which early detection can mean a better prognosis for the development of the patient's life. The aim of this program is to provide the most up-to-date and specialized education in this field of the online teaching market.

A highly specialized program that will provide the most advanced skills in the sector.

Incorporate to your specialization a highly educational program in Neurodegenerative Pathologies, with the confidence of learning from the best professionals in the sector"

Neurodegenerative Pathologies are already one of the most commonly diagnosed conditions in the elderly population. The aging of the population is causing the prevalence of these diseases to become very relevant.

The management of patients with neurodegenerative motor neurone disorders highlights the need for constantly up-to-date education for medical professionals practicing in this field.

In addition, the recognition of early signs and symptoms in neurodegenerative movement disorders and associated sleep disorders in parkinsonism and neurodegeneration will be discussed in depth.

The Postgraduate Diploma will develop how molecular alterations of some proteins are related to specific clinical syndromes. In addition, the biomarkers and CSFs that appear in the different Dementias and the common phenotypes in frontotemporal Dementias will be discussed.

This Postgraduate Diploma will cover the fundamental aspects for the management of these diseases. From the differential diagnosis to the appropriate treatment in each case.

For this, TECH will develop how molecular alterations of some proteins are related to specific clinical syndromes. In addition, we will discuss the biomarkers and CSFs that appear in the different Dementias and the common phenotypes in frontotemporal Dementias.

The Postgraduate Diploma in Neurodegenerative Pathologies aims to prepare with rigor, teach with precision and provide ways of improvement so that the student is able to lead realistic care and teaching programs in the specific area of their professional competencies.

This **Postgraduate Diploma in Neurodegenerative Pathologies** 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-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

With this Postgraduate Diploma you will be able to combine a high intensity specialization with your professional and personal life, achieving your goals in a simple and real way"

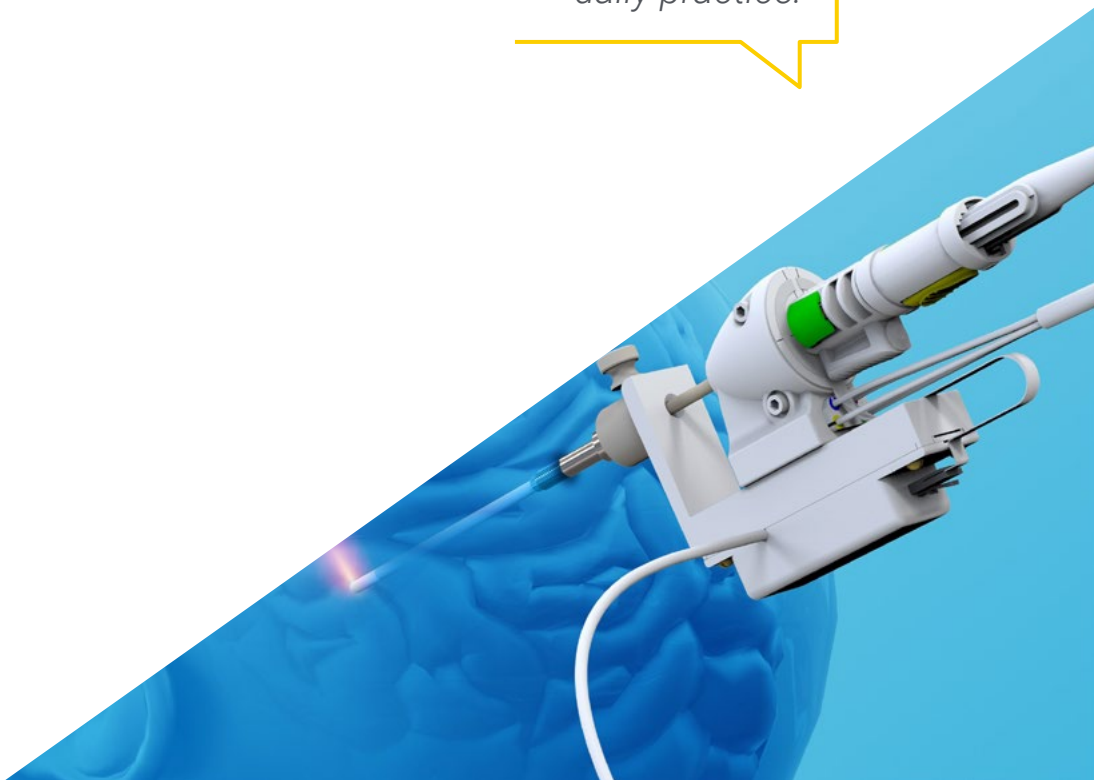
The latest advances in the field of Neurodegenerative Pathologies compiled in a Postgraduate Diploma of high efficiency, which will optimize your effort with the best results"

All the necessary methodology for the professional, in a high-impact, specific and concrete program.

A program designed to allow you to implement the knowledge that you acquire almost immediately in your daily practice.

The development of this Postgraduate Diploma is focused on the practice of the proposed theoretical learning. Through the most effective teaching systems, proven methods imported from the most prestigious universities in the world, you will be able to acquire new knowledge in a practical way. In this way, TECH strives to convert its efforts into real and immediate competencies.

Our online system is another of the strengths of our course. With an interactive platform that has the advantages of the latest technological developments, we put at your service the most interactive digital tools. This way, we can offer you a learning method that can be completely adapted to your needs, so that you can perfectly combine this Postgraduate Diploma program with your personal or professional life.



02

Objectives

The objective of this Postgraduate Diploma is to offer medical professionals a complete pathway to acquire knowledge and skills in the field of Neurodegenerative Diseases 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.

Our goal is simple: to help you get the most complete update on Neurodegenerative Diseases in a program fully compatible with your work and personal obligations"

General Objectives

- Know the most modern findings in the genetic and proteomic alterations of these diseases, as well as in the translational neurology that have produced these findings
- Acquire the appropriate and most effective tools to recognize the clinical picture, interpret the findings of complementary tests and appropriately treat patients with neurodegenerative diseases

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

Specific Objectives

Module 1. Neurodegenerative Dementias

- Be able to make a clinical differential diagnosis between the different degenerative dementias
- Associate molecular alterations of specific proteins with specific clinical syndromes
- Update on the knowledge of biomarkers in blood and CSF of the different types of neurodegenerative pathologies
- Know how to differentiate the different phenotypes of dementias and their different genetic and molecular alterations
- Update knowledge on current and clinical trial treatments for degenerative dementias and symptomatic management

Module 2. Neurodegeneration and Parkinsonism

- Be able to make an adequate diagnosis in the early stages of Parkinson's disease
- Know how to recognize clinically the types of parkinsonisms, their differences and their therapeutic implications and prognosis
- Recognize early signs and symptoms in neurodegenerative movement disorders
- Update knowledge on sleep disorders associated with neurodegenerative diseases and specifically Parkinson's disease and parkinsonisms

Module 3. Neurodegenerative Motor Neuron Diseases and Hereditary Spastic Parapesia

- Update knowledge on the classification of Neurodegenerative Motor Neuron Diseases
- Increase knowledge of therapeutic tools undergoing clinical trials and their future prospects
- Improve symptomatic management of patients with neurodegenerative motor neuron disorders
- Know how to recognize variants of Amyotrophic Lateral Sclerosis

Highly specialized objectives in a Postgraduate Diploma created to prepare the best professionals in Neurodegenerative Pathologies"

03

Course Management

This very complete Postgraduate Diploma in Neurodegenerative Pathologies is taught by leading specialists in the sector. Trained in different fields of clinical care and practice, all of them experienced 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 program putting their real and up-to-date experience at your service.

An exceptional opportunity to learn from the best professionals in the sector"

International Guest Director

Dr. Adriano Aguzzi is a leading specialist at European and international level, holding the position of director of the Swiss National Reference Center for Prion Diseases. From this institution, he delves into the diagnosis of Transmissible Spongiform Encephalopathies and develops his own therapeutic methods to address these pathologies from the thorough study of the immunological and molecular basis.

Aguzzi's greatest scientific achievements are related to the discovery of the pathways by which prions reach the central nervous system through genetic manipulation of mice in vivo. In addition, his laboratory is committed to the development of state-of-the-art tissue clarification technologies with which microscopic images of complete rodent brains are obtained for 3D reconstruction with maximum precision. These techniques are promising for the academic community, allowing the characterization of vascular phenotypes in the context of stroke and neurodegenerative diseases such as Alzheimer's or Parkinson's disease.

Among his many studies, his project Exploring the Locales of Cognitive Decline stands out. In it, Aguzzi proposes the combination of three-dimensional morphology with sophisticated fluorochrome chemistry and molecular methods of genome interrogation/perturbation. Through these revolutionary techniques, he aims to create a detailed atlas of the different cell types causing neurodegenerative damage.

His avant-garde contributions have received a variety of awards. These include the Ernst-Jung Award, the Robert-Koch Award and an honorary medal from the European Molecular Biology Organization. He was also awarded the NOMIS Distinguished Scientist Award and has received Advanced grants from the European Research Council (ERC) to further his innovations.

In addition, this distinguished neuroscientist is on the editorial board of Science and is editor-in-chief of the Swiss Medical Weekly. He is also a member of the advisory board of numerous philanthropic foundations and biomedical companies and serves as Director of the Institute of Neuropathology at the University of Zurich.

Dr. Aguzzi, Adriano

- Director of the Swiss National Reference Center for Prion Diseases
- Director of the Institute of Neuropathology, Zurich
- Professor at the University of Zurich
- Editor-in-Chief of the Swiss Medical Weekly
- Postdoctoral Fellow at the Research Institute for Molecular Pathology (IMP) in Vienna
- Doctor of Medicine, Faculty of Medicine, University of Freiburg
- Chairman of the Board of the European Brain Research Institute (EBRI) in Italy
- Member of: Scientific Advisory Board of the Italian Institute of Technology in Genoa, Advisory Board of the Giovanni Armenise-Harvard Foundation of Boston, Neurosciences Committee of the Wellcome Trust, London, Supervisory Board of the Roche Research Foundation

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

Management

Dr. Yusta Izquierdo, Antonio

- Degree in medicine and surgery in 1985 from the Faculty of Medicine of the Autonomous University of Madrid Obtained 5 passes, 16 Bs, 7 As, and 4 As with honors during the course of the degree
- Bachelor's Degree in medicine and surgery with the grade of outstanding, after the completion of the thesis "Plasmapheresis and immunosuppressants in the treatment of myasthenia gravis," in October 1985
- Doctor of Medicine and Surgery Degree from the Autonomous Medical School of Madrid with the Doctoral Thesis entitled: "Normal variations in short-, medium-, and long-lasting auditory evoked potentials. Mid- and long-latency evoked potentials in dementia patients" With the qualification of "apto cum laude by unanimous decision" In October 1990
- Specialty in Neurology at the Neurology Service of the Puerta de Hierro Clinic (Dr. Liaño Martínez) between 1987 and 1991
- Coordinator of the Neuromuscular Pathology Unit of the Neurology Service of the Puerta de Hierro Clinic in Madrid, between July 1990 and March 1991
- Specialist in Neurology at the University Hospital of Guadalajara from April 29, 1991 to May 2, 2004.
- Head of Neurology at the Integrated Care Management of Guadalajara, the University Hospital of Guadalajara and the Brain Injury Unit of the Institute of Neurological Diseases of Castilla La Mancha since May 3, 2004, a position he still holds today
- Professor of Health Sciences -Profile Neurology- at the Faculty of Medicine of the University of Alcalá, since October 1, 1991, position he currently holds
- Coordinator of the subject "MEDICAL CLINIC" of the Sixth Year, Faculty of Medicine of Alcalá, at the University Hospital of Guadalajara; from the academic year 1993-94 to the academic year 2010-1011

Professors

Dr. Hernandez Cristobal, Jaime

- Degree in Medicine from the University of Salamanca
- Neurology Specialist, Fundación Jiménez Díaz Hospital (Madrid)
- Doctor in Medicine, Autonomous University of Madrid
- Author of numerous publications specialized in different aspects of Neurology in scientific journals

Dr. Carvalho Monteiro, Guilherme

- Master's Degree in Neuroimmunology at the Autonomous University of Barcelona.
- Specialty of Neurology via MIR at the University Hospital of Guadalajara (HUG)
- External Rotation at the Movement Disorders Unit of the Ramón y Cajal University Hospital of Madrid, Spain Head of unit: Juan Carlos Martínez Castrillo
- Master's Degree in "Clinical Reasoning and Practice" from the University of Alcalá, Spain
- Degree in Medicine from the University of Salamanca. He has numerous scientific publications in prestigious medical journals

Dr. Romero Delgado, Fernando

- Assistant Neurology Specialist at the University Hospital of Guadalajara
- Consultant Neurologist, Multiple Sclerosis and Other Demyelinating Diseases Monographic Consultation; and Neurology on-call at Sanitas La Moraleja University Hospital
- On-call contract as Neurology Assistant at Guadalajara University Hospital
- Assistant Neurology Specialist at San Carlos Clinical Hospital
- Integrated Researcher at the Multiple Sclerosis Unit of the San Carlos Clinical Hospital, through the Foundation for Biomedical Research
- Integrated Researcher in the Multiple Sclerosis and Others D Diseases Unit at the General University Hospital Gregorio Marañón, through the Foundation for Biomedical Research

04

Structure and Content

The structure of the contents has been designed by a team of professionals, aware of the current relevance of the program in order to advance in the labor market with confidence and competitiveness, and to practice the profession with the excellence that only the best education allows.

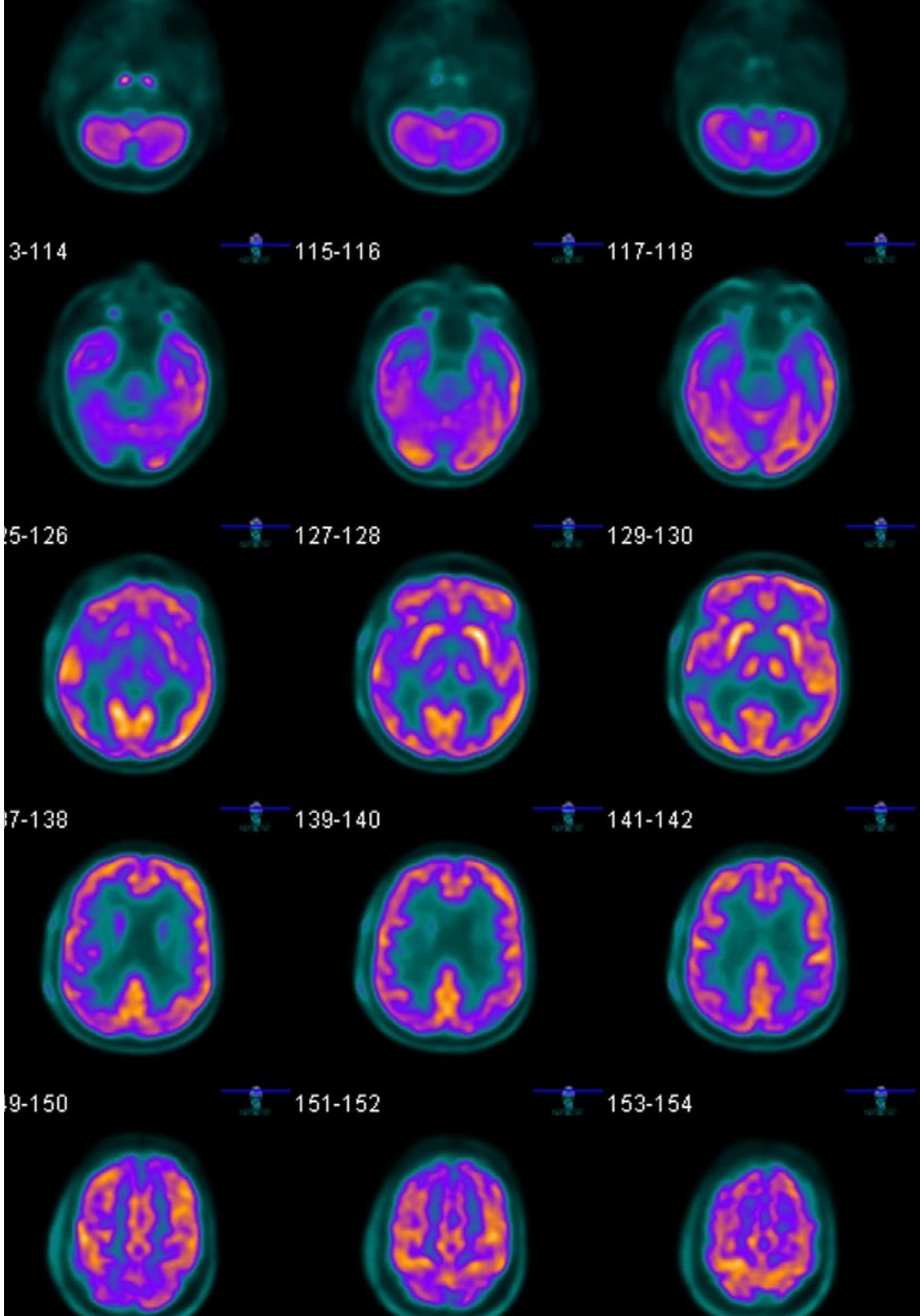
This Postgraduate Diploma contains the most complete and up-to-date scientific program on the market"

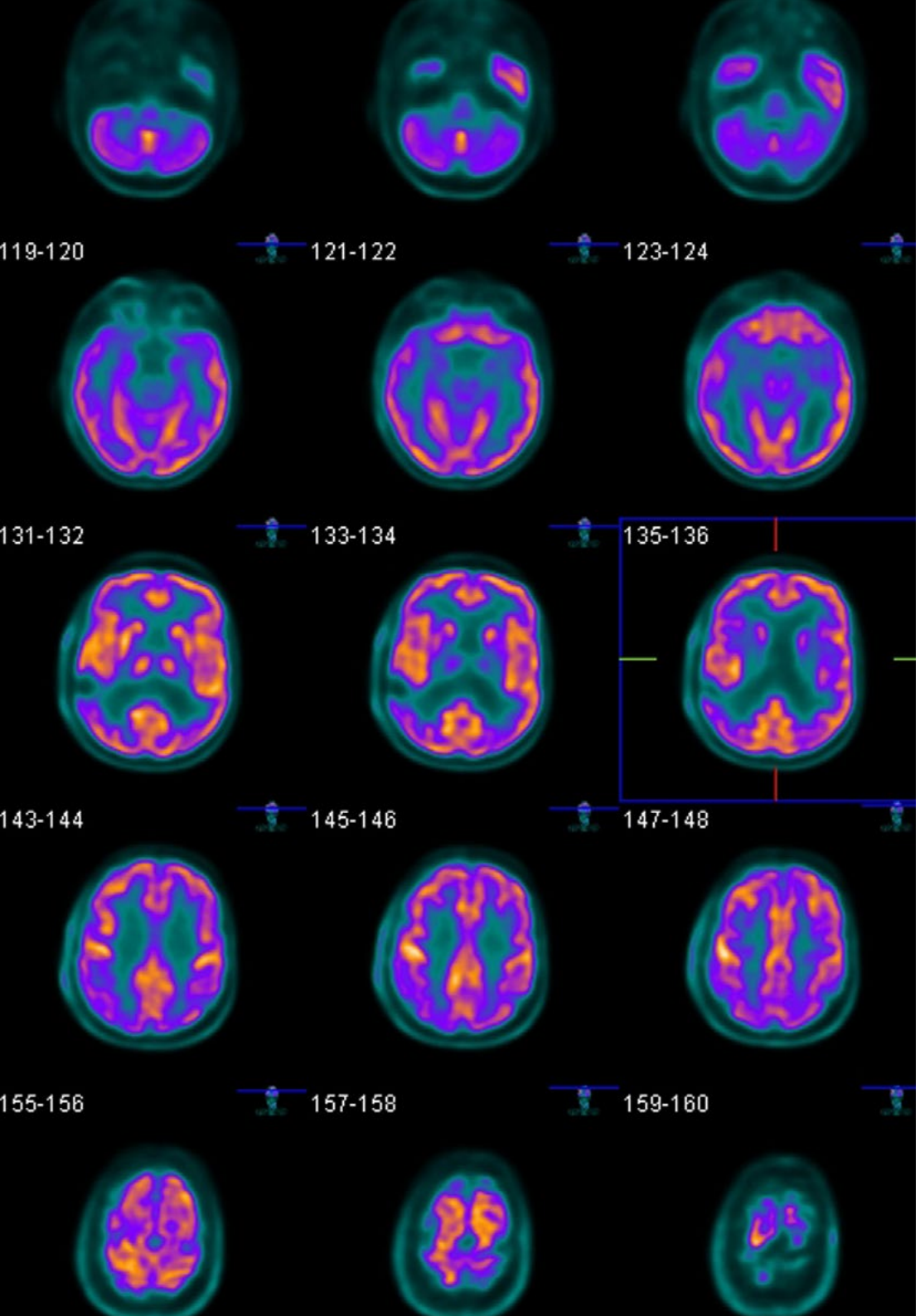
Module 1. Neurodegenerative Dementias

1.1. Alzheimer's Disease.
1.2. Clinical Variants of Alzheimer's Disease
1.3. Familial Alzheimer's Disease
1.4. Fronto-Temporal Dementia
1.5. Dementia Lobar Degeneration with Immunoreactive Inclusions for FUS
1.6. Pick Disease
1.7. Biomarkers of Neurodegenerative Dementias
1.8. Progressive Subcortical Gliosis
1.9. Treatment of Dementias
  1.9.1 Medical Treatment
  1.9.2 Symptomatic Treatment
  1.9.3 New Perspectives in the Treatment of Neurodegenerative Dementias
1.10. Socio-Sanitary Problems and Palliative Treatment of Neurodegenerative Dementias

Module 2. Neurodegeneration and Parkinsonism

2.1. Parkinson's Disease
2.2. Differential Diagnosis of Parkinsonism
2.3. Lewy Body Dementia
2.4. Progressive Supranuclear Palsy
2.5. Cortico-Basal Degeneration
2.6. Tauopathies
2.7. Multisystem Atrophies
  2.6.1 Shy-Drager Syndrome
  2.6.2 Oliponto-Cerebellar Atrophy
  2.6.3 Striato-Nigric Degeneration
2.7. Parkinson-Dementia Syndromes
2.8. Huntington's Disease
  2.8.1 Clinical Manifestations
  2.8.2 Pharmacological Management
2.9. Hyposmia in Neurodegenerative Disorders
2.10. Sleep Disorders in Neurodegenerative Diseases





Module 3. Neurodegenerative Motor Neuron Diseases and Hereditary Spastic Parapesia

3.1. Upper Motor Neuron Diseases Primary Lateral Sclerosis
3.2. Hereditary Spastic Paraparesis
3.3. Chronic Spinal Muscular Atrophy
3.4. Oras Spinal and Bulbar Muscular Atrophies
3.5. Sporadic Amyotrophic Lateral Sclerosis
3.6. Familial Amyotrophic Lateral Sclerosis
3.7. Treatment of Amitrophic Lateral Sclerosis
  3.7.1 Multidisciplinary Team in the Treatment of ALS Patients
  3.7.2 Pharmacological Management of the ALS Patient New Perspectives
3.8. Gene Therapy for Chronic Spinal Muscular Atrophy
3.9. Post-Polio Syndrome
3.10. ALS-Parkinson's-Dementia Complex

A unique, key, and decisive program 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.**

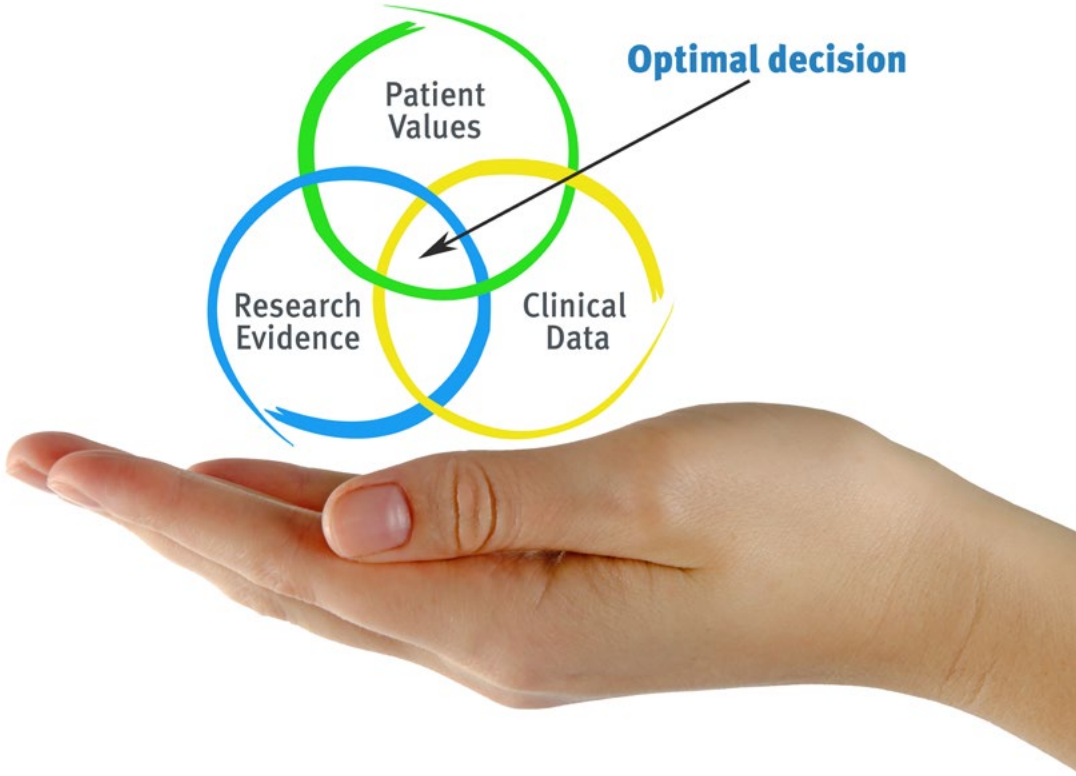
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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:

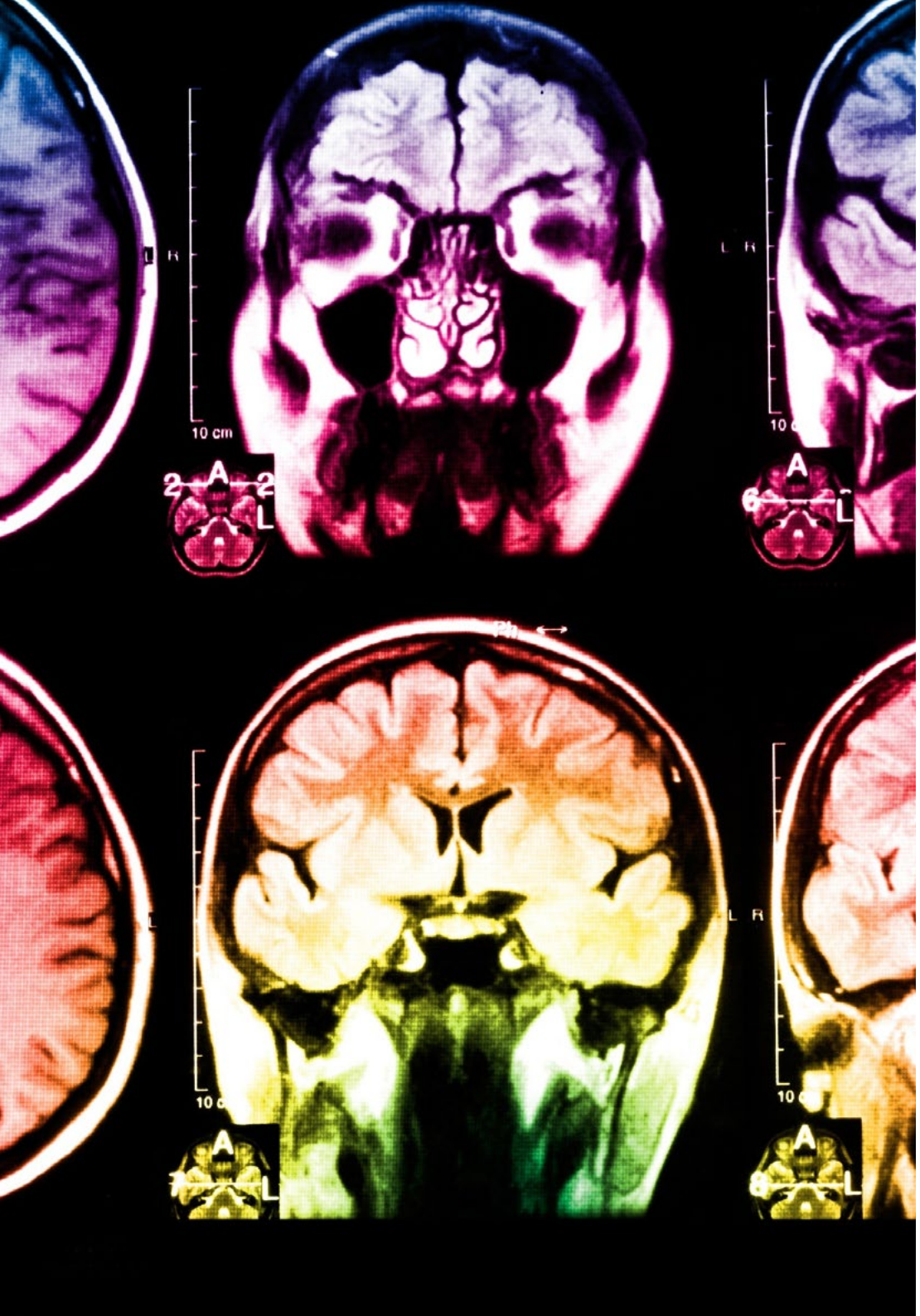
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better 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.

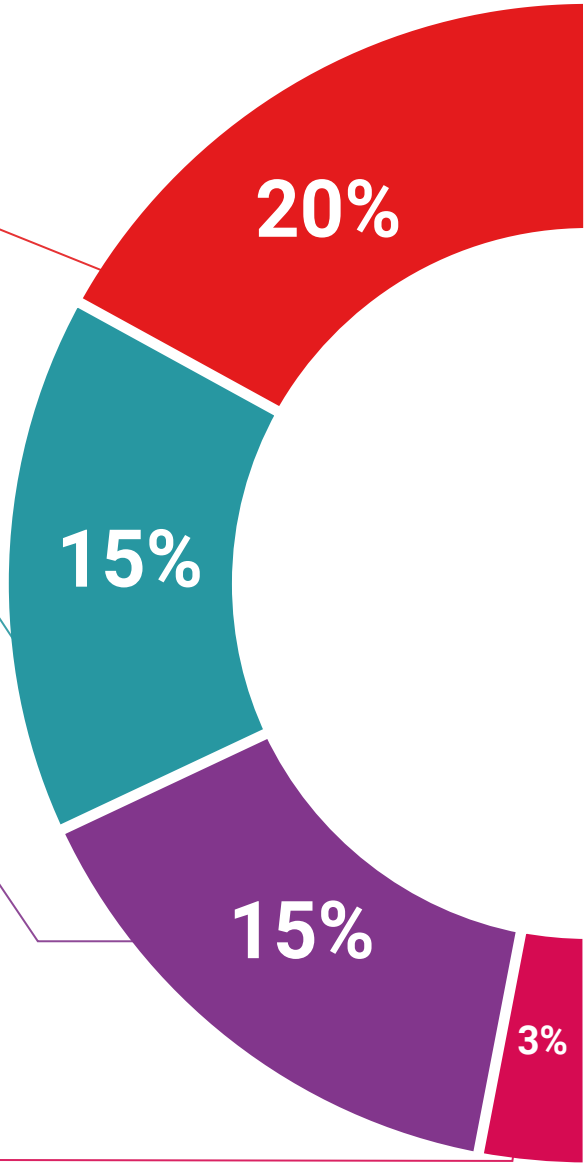
Interactive Summaries

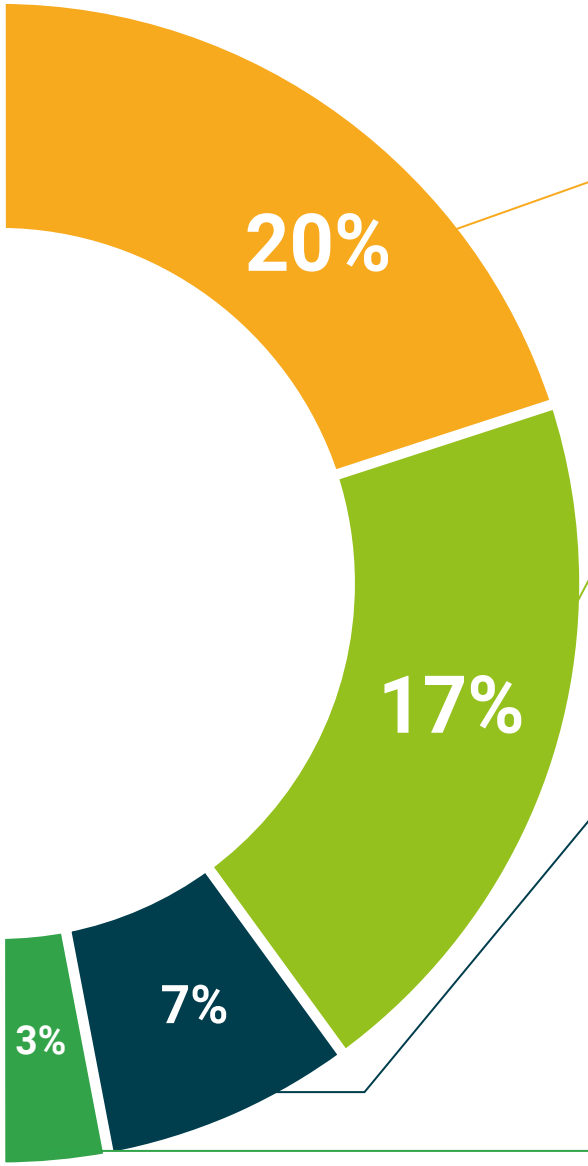
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 Postgraduate Diploma in the Neurodegenerative Pathologies guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma qualification issued by TECH Technological University.

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

This **Postgraduate Diploma in Neurodegenerative Pathologies** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University**.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Neurodegenerative Pathologies**

Official Nº of Hours: **450 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Neurodegenerative Pathologies

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

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

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