



Neurological Physiotherapy in Alzheimer's Disease and Other Neurodegenerative Dementias

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/physiotherapy/postgraduate-certificate/neurological-physiotherapy-alzheimer-disease-other-neurodegenerative-dementias

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# tech 06 | Presentation

The reduced mobility that is common in Alzheimer's patients, due to the effects of the disease itself, causes them to become increasingly dependent, which is exacerbated by increased muscle weakness, thereby further reducing independence.. Therefore, physiotherapists must perform their work correctly as it is a key factor in increasing these patients' independence and improving their physical conditions. With this Postgraduate Certificate, TECH wants to enhance the training of these professionals, offering them the most complete information on the care of these patients.

This program will provide the theoretical knowledge required to understand the relationship between cortical atrophy of the frontal, temporal, parietal and occipital areas with aphasia, apraxias and agnosias, and will describe the types of dementia and its risk factors. The physiotherapist will also learn to differentiate the different types of evolution of the disease, assess the alteration of the ability to perform Daily Living Activities (DLA) and the need to educate caregivers.

Additionally, the objectives to slow down the deterioration and try to maintain functionality and independence as long as possible will be explained, and tools will be provided to stimulate memory, cognitive stimulation, behavioral therapies and DLA training, complementing them with functional, recreational and leisure physiotherapy techniques.

The teaching staff of this program is composed of specialists in the areas of intervention of each pathology, from prestigious health centers and universities, sensitized to continuous quality learning based on scientific evidence to offer a holistic approach to the patient with neurodegenerative disease, and committed to quality teaching through new educational technologies. Learning is done through real cases, guided by an expert, and continuous evaluation through assessment and self-assessment activities and exercises

In short, TECH has set out to create contents of the highest teaching and educational quality that will turn students into successful professionals, following the highest quality standards in teaching at an international level. Therefore, TECH presents this program with comprehensive content that will help become elite neurological physiotherapists.

This Postgraduate Certificate in Neurological Physiotherapy in Alzheimer's Disease and Other Neurodegenerative Dementias contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical case studies presented by specialists in Neurological Physiotherapy
- The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice
- Exercises where the self-assessment process can be carried out to improve learning
- Algorithm-based interactive learning system for decision-making
- Special emphasis on innovative methodologies in Neurological Physiotherapy
- 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



Immerse yourself in the study of this high-level Postgraduate Certificate and improve your skills in therapies for people with degenerative diseases"

# Introduction | 07 tech



This Postgraduate Certificate is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Neurological Physiotherapy, you will obtain a qualification from the world's largest online university: TECH"

It includes, in its teaching staff, professionals belonging to the field of physiotherapy, who contribute their vast experience to this program, in addition to recognized specialists of reference societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the physiotherapist must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Neurological Physiotherapy in Alzheimer's Disease and Other Neurodegenerative Dementias.

This Postgraduate Certificate allows training in simulated environments, which provide immersive learning programmed to train for real situations.

A 100% online program will allow you to balance your studies with your professional work while increasing your knowledge in this field.







# tech 10 | Objectives



# **General Objectives**

- Acquire new knowledge in neuroscience applied to neurodegenerative diseases
- Promote a critical attitude that favors clinical practice based on the most recent scientific evidence and clinical reasoning
- Motivate physiotherapists to specialize in the field of neurological physiotherapy
- Provide comprehensive treatment plans



Specific learning in Neurological Physiotherapy will allow great advances in people with degenerative diseases"





# Objectives | 11 tech



# **Specific Objectives**

- Understand in depth the relationship between cortical atrophy in different areas (frontal, temporal, parietal and occipital) with aphasia, apraxias and agnosias
- Identify the various symptoms and clinical manifestations according to the area of involvement
- Delve deeper into and differentiate the different psychiatric manifestations
- Define strategies to access disoriented and/or disconnected patients
- Describe strategies to promote caregiver treatment adherence
- Develop the role of physical therapists in managing and treating dementia patients





# tech 14 | Course Management

#### Management



#### Mr. Pérez Redondo, José María

- Physiotherapist specialized in Neurology and Neurosurgery in acute and critical patients
- Degree in Physiotherapy from the European University of Madrid
- Diploma in Physiotherapy from the School of Physiotherapy, Podiatry and Nursing at the Complutense University of Madrid
- 5 levels of the Postgraduate Specialization Course in Osteopathic Manual Physical Therapy, organized by the Department of Human Anatomy and Embryology, Faculty of Medicine, University of Alcalá de Henares
- Course on Radiology and Imaging Techniques for Physiotherapists and Occupational Therapists, organized by Fuenlabrada Hospital
- Neurodynamic Mobilization Course for Physiotherapists, organized by Fuenlabrada Hospita
- Course on Functional Re-education in Parkinson's Disease, organized by the Federation of Health and Social and Health Sectors of Comisiones Obreras
- President of the Scientific Committee for the II National Conference on Myofascial Pain and Dry Needling



# Course Management | 15 tech

#### **Professors**

#### Ms. Hermida Rama, Josefa

- Physiotherapist of the Rehabilitation Service at the San Carlos Clinical Hospital
- Associate professor of clinical internships at the Faculty of Nursing, Physiotherapy and Podiatry
- Graduate in Physiotherapy from the Faculty of Nursing, Physiotherapy and Podiatry at the UCM
- Expert in Neurological Physiotherapy. E.U. Nursing, Physiotherapy and Podiatry by the UCM
- Advanced Program of Basic Study for the Functional Recovery of the Arm and Hand of Adult Neurological Patients by the Bobath Concept





# tech 18 | Structure and Content

# **Module 1.** Alzheimer's Disease and Other Neurodegenerative Dementias: Frontotemporal Dementia, Lewy Body Dementia, Vascular Dementia

- 1.1. Introduction
  - 1.1.1. Anatomy
  - 1.1.2. Physiology
  - 1.1.3. Classification
- 1.2. Epidemiology
- 1.3. Etiology
  - 1.3.1. Transmission Mode
  - 1.3.2. Frequency
  - 1.3.3. Age of Onset
- 1.4. Evolution
- 1.5. Prognostic Factors
- 1.6. Evaluation/Diagnosis
  - 1.6.1. Clinical Manifestations
  - 1.6.2. Diagnostic Imaging
  - 1.6.3. Neurological Examination
  - 1.6.4. Neurological Assessment Scales
- 1.7. Treatment
  - 1.7.1. Medical/Surgical Treatments
  - 1.7.2. Physiotherapy
  - 1.7.3. Occupational Therapy, Speech Therapy and Neuropsychology
- 1.8. Orthopedics
  - 1.8.1. Support Products
  - 1.8.2. Orthoses
- 1.9. Readaptation
  - 1.9.1. Social Aspects/Support
  - 1.9.2. Comprehensive Care for Patients, Families and Caregivers
- 1.10. Early Prevention and Detection





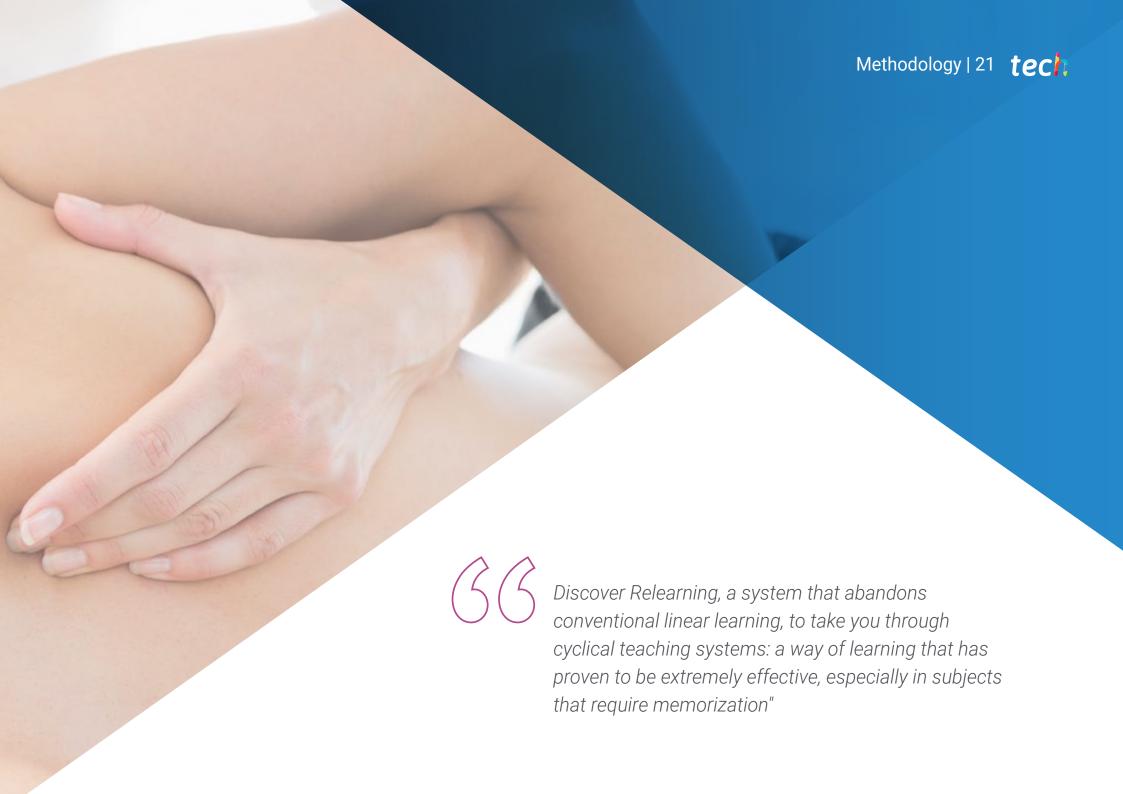


A unique, key, and decisive training experience to boost your professional development"



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.



# tech 22 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Physiotherapists/kinesiologists 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 of professional physiotherapy 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. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist 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.



# tech 24 | Methodology

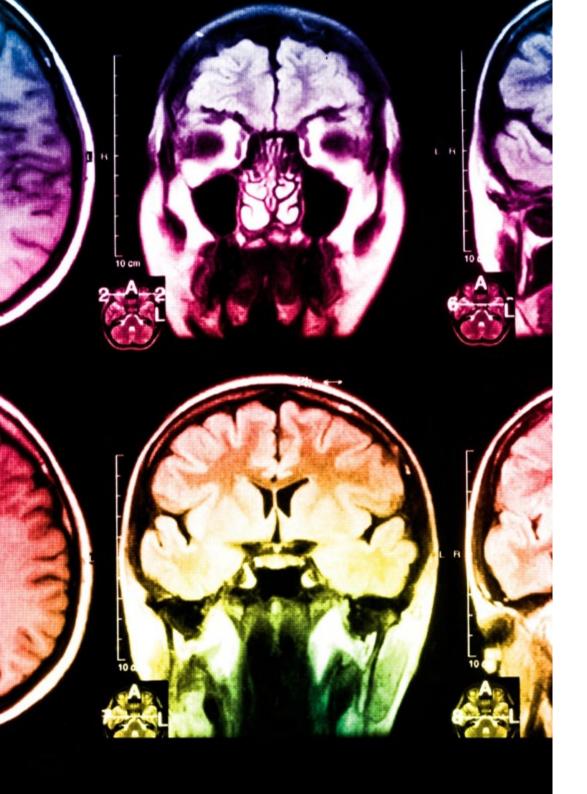
#### Relearning Methodology

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.

The physiotherapist/kinesiologist will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.





# Methodology | 25 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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 our learning system is 8.01, according to the highest international standards.

# tech 26 | Methodology

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really 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.



#### **Physiotherapy Techniques and Procedures on Video**

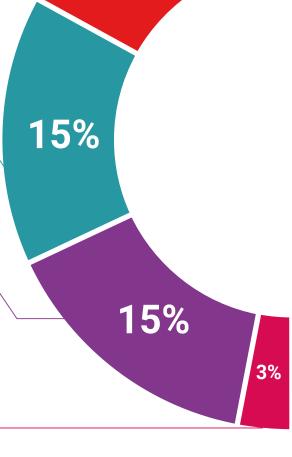
TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.

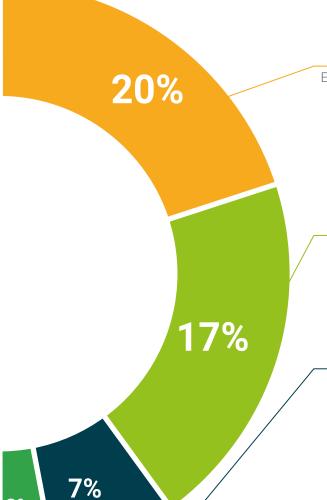
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.



#### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### **Classes**

There is scientific evidence on the usefulness of learning by observing experts.

The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.







# tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Neurological Physiotherapy** in **Alzheimer's Disease and Other Neurodegenerative Dementias** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: Postgraduate Certificate in Neurological Physiotherapy in Alzheimer's Disease and Other Neurodegenerative Dementias

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

#### Postgraduate Certificate in Neurological Physiotherapy in Alzheimer's Disease and Other Neurodegenerative Dementias

This is a program of 180 hours of duration equivalent to 6 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



# health future people information searching technology tech university

# Postgraduate Certificate Neurological Physiotherapy in Alzheimer's Disease and Other Neurodegenerative Dementias

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



