

# Postgraduate Diploma

Alzheimer's Disease, Vascular  
Cognitive Impairment and Lewy  
Bodies





## Postgraduate Diploma Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-alzheimer-disease-vascular-cognitive-impairment-lewy-bodies](http://www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-alzheimer-disease-vascular-cognitive-impairment-lewy-bodies)

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# 01

# Introduction

Disorders that involve dementia require the professional to be constantly updated in each breakthrough that the fight against these diseases is developing in this broad field of action. In this program we offer you a review of the advances in the diagnosis and treatment of three of the most frequent and complex ailments: Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies.





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*This specialization is the best option you can find to specialize in Dementia and update your knowledge in this field”*

Patients with forms of dementia gradually lose more and more of their abilities. For this reason, it's necessary to provide them with more personalized and multidisciplinary care, with professionals who are able to adapt to any situation and who have the most up to date knowledge in this field. By integrating the vision of specialists in neurology, geriatrics, psychiatry, neuro-radiology, nuclear medicine and neuropathology we are able to offer exceptional specialization, which is complete and enriching.

Basic concepts will be taught in a developing educational structure by leading professionals in their fields, in both functional and structural imaging biomarkers as well as in neuropathology, including genetic counseling and neuropsychology. We never miss the opportunity to train students to be able to deal with the diagnostic process and the management of people who suffer from rapidly progressive dementia in its different forms. In addition, the student will be presented with real situations within which they need to make clinical and diagnostic decisions which are all the more complex due to their differential diagnosis and their therapeutic approach.

The theoretical contents will be reinforced by clinical-practical cases, educational videos, online tutorials, as well as support material, always based on the latest information in the field.

The Postgraduate Diploma in Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies is an educational project committed to training high quality professionals. A program devised by professionals specialized in each specific field who encounter new challenges every day.

After completing this TECH Postgraduate Diploma, the student will have sufficient knowledge to approach the management of people with dementia. From the first moment, they will know everything that comes with this type of disease, from its diagnosis, treatment and possible adverse effects to the importance of communication with the family members. So don't hesitate any longer and become a true professional through the latest educational technology 100% online.

This **Postgraduate Diploma in Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Practical case studies presented by experts in dementia.
- ♦ The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- ♦ The latest information on treatment for dementia patients.
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ A special emphasis on innovative methodologies in the field of Dementia.
- ♦ 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



*Do not miss the opportunity to take this Postgraduate Diploma in Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies with us. It's the perfect opportunity to advance your career"*

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*With this Postgraduate Diploma you will be able to update your knowledge in Dementias and, in addition, you will obtain a certificate from TECH Global University"*

The teaching staff includes professionals from the healthcare sector, who bring their experience to this specialisation program, as well as renowned specialists from leading societies and prestigious universities.

Its Multimedia Content, elaborated 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 specialization programmed to train in real situations.

This program is designed around Problem Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Dementia with extensive experience.

*The audiovisual contents of this Postgraduate Diploma will allow you to advance quickly*

*This 100% online Postgraduate Diploma will allow you to combine your studies with your professional work while expanding your knowledge in this field*



# 02 Objectives

The program in Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies is aimed at facilitating the medical professional's performance with the latest advances and most innovative treatments in the sector.







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*This is the best option to learn about the latest advances in the treatment of dementias and make a qualitative leap of the highest level in your specialization"*



## General Objectives

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- ♦ Gain in-depth knowledge of dementia, how to diagnose it and how to treat it.
- ♦ Identify the risk factors and the possibility of prevention
- ♦ Enter the very versatile and extremely difficult field of dementia diseases
- ♦ Learn how to detect the early symptoms that could be a sign of this disease
- ♦ Explore clinical, motor, cognitive, dysautonomia and neuropsychiatric symptoms
- ♦ Know the different clinical presentations of the disease, some of which are first seen in a psychiatric consultation or in the form of neuromuscular or movement disorders before being associated with a type of dementia
- ♦ Learn the particularities for examining the signs and symptoms, both cognitive and behavioral, as well as understanding the therapeutic approach
- ♦ Train the students in the knowledge of the different assessment tools and cognitive rehabilitation used in various dementias
- ♦ Understanding genetically conditioned dementias and their inheritance patterns
- ♦ Know the different neuroimaging equipment and radiotracers available to evaluate the specific processes involved in neurodegenerative conditions with dementia
- ♦ Provide knowledge on the different imaging techniques used in the evaluation of patients with cognitive impairment, both structural studies with CT or MRI, and functional studies that can be performed with MRI or Perfusion and Diffusion studies, as well as functional MRI studies
- ♦ Know the indications and usefulness of each technique in the different causes of dementia
- ♦ Delve into the study of Alzheimer's disease, with emphasis on early diagnosis, as well as on imaging markers that allow assessment of progression and possible response to treatment
- ♦ Interpret the most important lesions which characterize the different neurodegenerative pathologies
- ♦ Know the main categories of rapidly progressive dementia syndromes, the most prevalent diseases in each one of these categories and the diagnostic algorithm to follow
- ♦ Learn to consider important aspects when assessing older people with cognitive deterioration or dementia, taking into account both the impact of neurodegeneration as well as the clinical evolution of people suffering from this condition



## Specific Objectives

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- ◆ Obtain sufficient training to be able to deal with the diagnostic process of Alzheimer's disease
- ◆ Learn how to use diagnostic biomarkers in an appropriate way
- ◆ Know the treatment of cognitive and non-cognitive symptoms, as well as the correct communication of the diagnosis and support throughout the course of the disease
- ◆ Gain knowledge of genetic assessment
- ◆ Address the diagnostic process of vascular dementia, its clinical phenotypes and its differential diagnosis with other types of dementia, both from the clinical and neuropsychological point of view
- ◆ Know the cardiovascular risk factors as well as their prevention in relation to vascular dementia
- ◆ Understand the value of structural MRI in the diagnostic process
- ◆ Understand the different aspects of the therapeutic approach to this complex type of dementia (cognition, behavior and non-pharmacological treatments). Also acquire the ability to communicate a diagnosis and support a patient and their family throughout the disease
- ◆ Know the diagnostic criteria, the therapeutic possibilities (weighing up the risks and benefits of the different approaches) and the interaction of the therapeutic approach with the approach of other comorbid pathologies in these patients
- ◆ Obtain the appropriate training to deal with this complex and exciting disease

03

# Course Management

The program's teaching staff includes leading experts in Dementia, who contribute their vast work experience to this specialization program. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.





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*Leading professionals in the field have come together to teach you the latest advances in treating people with dementia”*

## International Guest Director

Internationally recognized for his contributions to Neurology, Dr. Richard Levy has extensively investigated the histology of Dementias and other brain pathologies. In particular, he has led multiple clinical trials at the Institute of Memory and Alzheimer's Disease (IM2A), associated with the Salpêtrière Hospital, which have provided innovative results to understand many of the conditions related to the human nervous system.

His areas of expertise, in addition to Neurodegenerative Diseases, include Electrophysiology and executive functions. In the latter field, he has several analyses on frontal lobe capabilities in decision making and action planning. From the beginning of his career, in the laboratory of the renowned Professor Yves Agid, he conducted pioneering research on the anatomy of the Basal Ganglia. In this way, he has stood out for his innovative skills in the study of cognition and behavior, and was chosen for a postdoctoral stay in this field at Yale University.

Also, thanks to his cutting-edge knowledge, he has achieved prominent roles as the Director of the FRONTlab Research Team at the Brain and Spinal Cord Institute. From that scientific group he has also examined behavioral disorders targeting Apathy and Disinhibition. In parallel, he has numerous articles, published in high impact journals, widely cited by other experts.

In addition to his research work, Dr. Levy also has a prominent career in the clinical setting. His work as Director of the Department of Neurology at the Saint-Antoine University Hospital, or as head of the specialized unit at the Salpêtrière Hospital, is evidence of this. In both institutions he collaborates with the care of patients with medical problems where the boundaries between Neurosciences and Psychiatry are blurred.



## Dr. Levy, Richard

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- Director of the FRONTlab of the Brain Institute of the Salpêtrière Hospital, Paris, France
- Head of the Institute of Memory and Alzheimer's Disease (IM2A), associated with the Salpêtrière Hospital
- Director of the Department of Neurology, Saint-Antoine University Hospital, Paris, France
- Academician at the Sorbonne University
- Doctorate in Medical Sciences from the Sorbonne University
- Research stay at Yale University, United States

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

## Management



### Dr. Manzano Palomo, María del Sagrario

- Specialist in Neurology
- Clinical neurologist at the Infanta Leonor Hospital, Madrid. 28th October 2018
- Degree in Medicine from the Complutense University Madrid. June 2001

## Professors

### Dr. Esteve, Ainhoa

- ♦ Degree in Medicine and Surgery. University of Malaga, October 2000
- ♦ Master's Degree in Healthcare Management International University of La Rioja, 2019
- ♦ Master's Degree in Palliative Care University of Valladolid, June 2007
- ♦ Specializing in Geriatrics via Internal Medicine Residency June 2002 - 2006. Cruz Roja Central Hospital Madrid
- ♦ Geriatrics Faculty Area Specialist Geriatrics Department. Infanta Leonor University Hospital, Madrid, Spain, April 2013-present

### Dr. Rábano Gutiérrez del Arroyo, Alberto

- ♦ PhD Faculty of Sciences at the Autonomous University of Madrid, March 2014
- ♦ Degree in Medicine and Surgery from the Faculty of Medicine at the Complutense University of Madrid. June 1984
- ♦ Medical Specialist in Pathological Anatomy (Internal Medicine Residency), 1990
- ♦ Co-ordinator at the Department of Neuropathology and Tissue Bank, CIEN Foundation (ISCIII)-Queen Sofia Foundation Alzheimer Center Scientific Director, CIEN Tissue Bank November 2007-present





**Dr. Zea, Marian**

- ♦ PhD in Medicine from the University of La Laguna, Tenerife
- ♦ Degree in Medicine and Surgery from the University of Granada
- ♦ Master's Degree in Neuro-immunology from the Autonomous University Madrid
- ♦ Specialist in Neurology, University Hospital of the Canary Islands (La Laguna, Santa Cruz de Tenerife)
- ♦ Member of the Neurology Department- Alzheimer's Research Project Unit Reina Sofia Foundation CIEN Foundation
- ♦ Member of the team of the Diagnostic Guidance Unit in Dementias of the Research Center for Neurological Diseases Foundation (CIEN) Carlos III Health Institute. Madrid
- ♦ Member of the group of the National Biobanks Platform Tissue Bank (BT-CIEN) Neurological Diseases Research Center Foundation Carlos III Health Institute. Madrid

04

# Structure and Content

The structure of the content has been designed by the best professionals in the sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to teaching.





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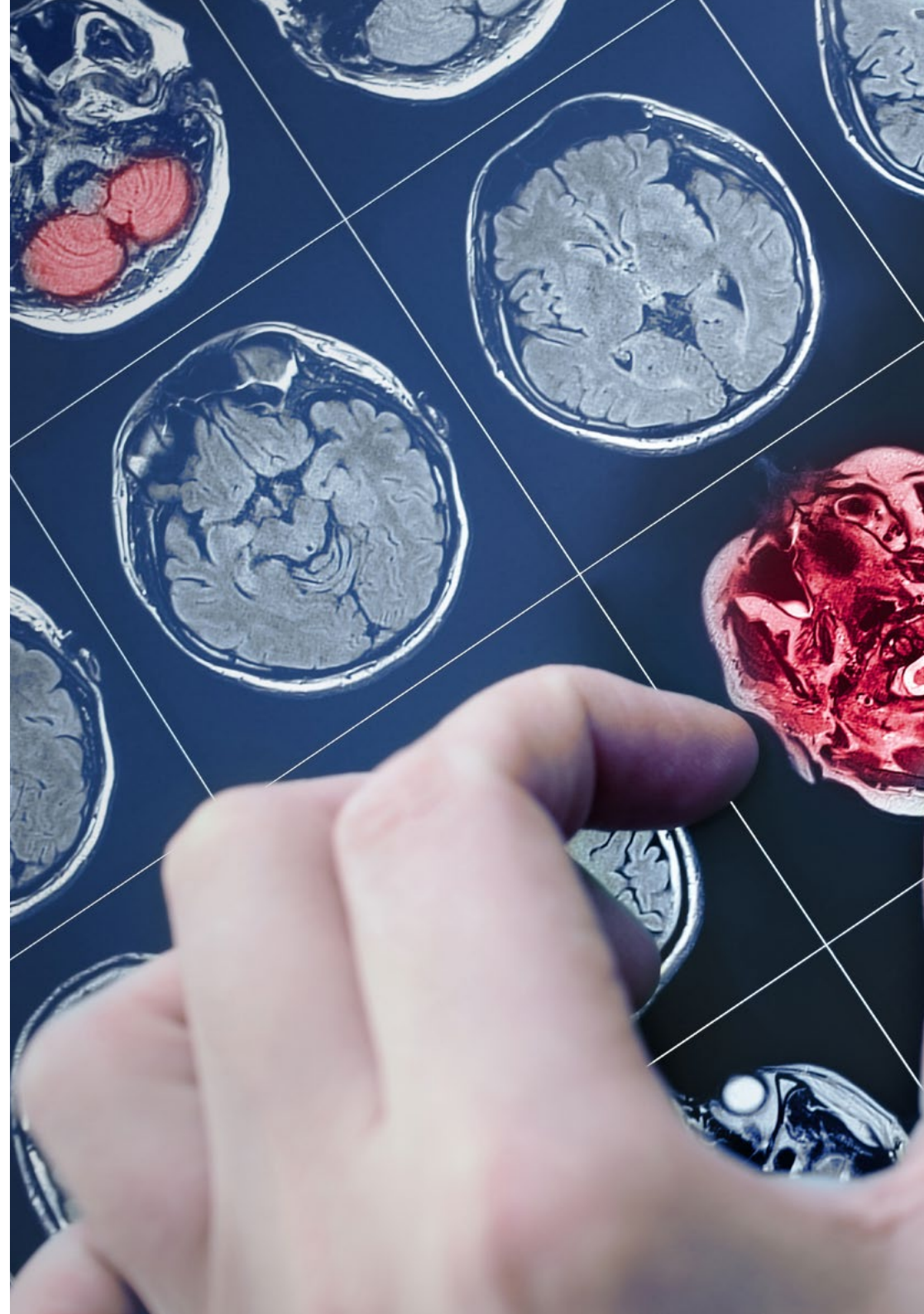
*This Postgraduate Diploma in Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies contains the most complete and up-to-date scientific program on the market”*

### Module 1. Alzheimer's Disease.

- 1.1. Concept
- 1.2. Epidemiology
- 1.3. Risk factors
- 1.4. Typical and Atypical Clinical Phenotypes
- 1.5. Diagnostic Criteria
- 1.6. Biomarkers in Alzheimer's Disease
- 1.7. Treatment Focused on Cognition Pharmacological and Non-pharmacological
- 1.8. Treatment of BPSD
- 1.9. Future Therapeutic Targets
- 1.10. Genetic Assessment

### Module 2. Vascular Cognitive Impairment

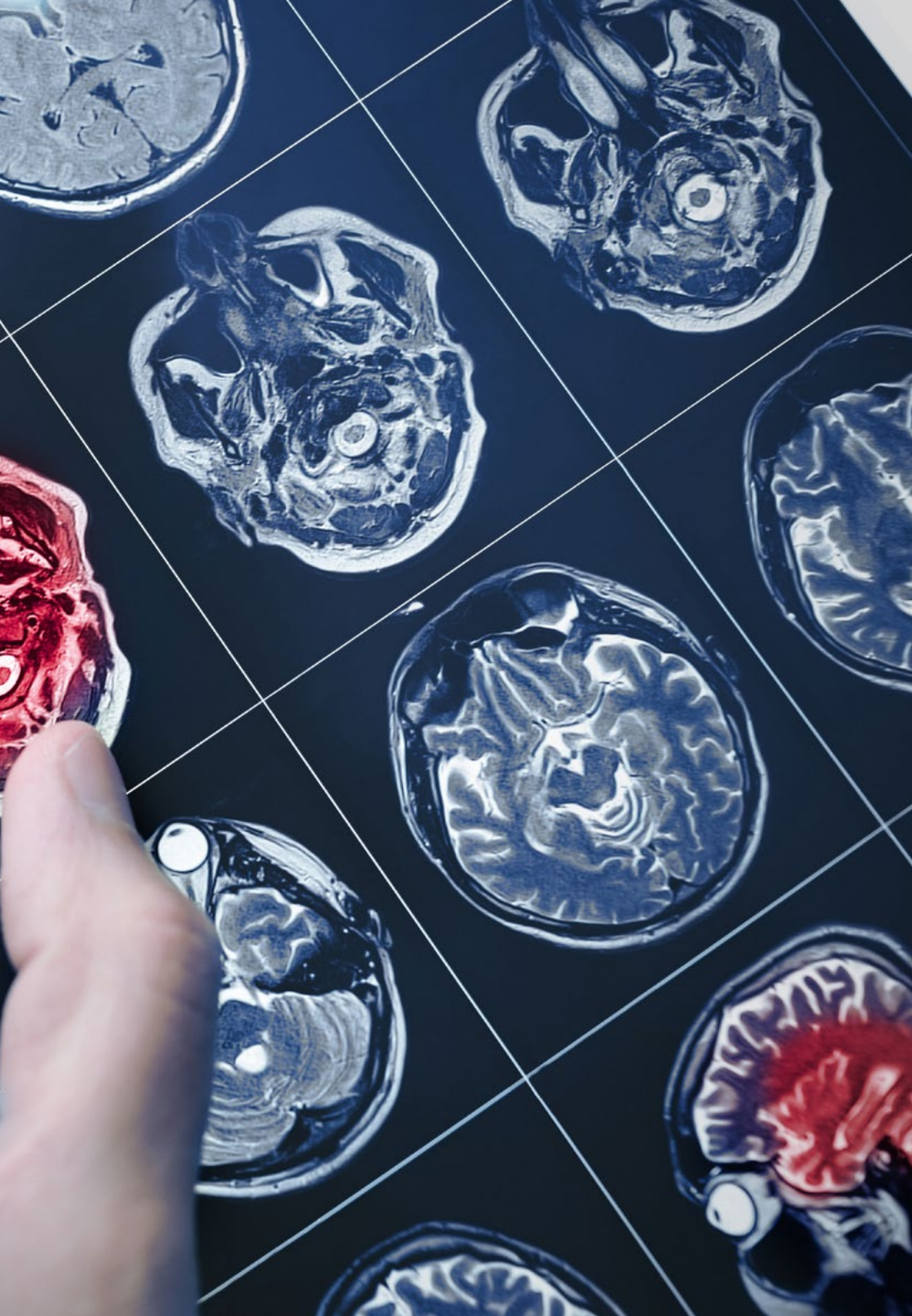
- 2.1. Concept
- 2.2. Risk factors
- 2.3. Epidemiology
- 2.4. Diagnostic Criteria
- 2.5. Clinical Phenotypes
- 2.6. Neuropsychological Aspects
- 2.7. Biomarkers in Structural Imaging
- 2.8. Treatment Focused on Cognition
- 2.9. Treatment Focused on Behavior
- 2.10. Non-Pharmacological Treatment



### Module 3. Lewy Body Dementia

- 3.1. Introduction. Lewy Body Dementia Within Synucleinopathies
- 3.2. Epidemiology
- 3.3. Clinical and Radiological Diagnostic Criteria Topography of Lesions in Images and their Clinical Expression Differential Diagnosis Based on the Clinical Expression of the Topographic Lesion
- 3.4. Early and Late Clinical Semiology Clinical Phenotypes
- 3.5. Diagnostic Approach and Clinical Management of Dysautonomia and the Common Clinical Comorbidities Falls and Fractures Sleep Disorders. Behavioral Disorders
- 3.6. Pharmacological Treatment Focused on Cognition
- 3.7. Non-Pharmacological Treatment
- 3.8. Treatment Focused on Motor Skills
- 3.9. Pharmacological and Non-pharmacological Treatment Focused on Behavior
- 3.10. Considerations for Advanced Decision Planning for People with Lewy Body Disease

**“** *This specialization will allow you to become a highly qualified professional, adding to your CV the competitiveness of a high-level postgraduate diploma in Dementias”*



05

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

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 Re-learning, 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 abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can experience a way of learning that is shaking the foundations of traditional universities around the world.*



According to Dr. Gervas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.



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*Did you know that this method was developed in 1912 for Harvard 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 grasp concepts, but also develop their mental capacity by evaluating real situations and applying their 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.



## Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

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 simple 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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

Over 250,000 physicians have been trained using this methodology, with unprecedented success in all clinical specialties regardless of surgical load. This teaching methodology is developed in a highly demanding environment, with a university student body of high socio-economic profile and an average age of 43.5 years.

*Re-learning 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 multimedia content presentation training Exclusive 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

The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of achieving their goals.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



#### 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 Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Diploma issued by TECH Global University.



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*Successfully complete this training program and receive your university certificate without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Diploma in Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies** 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.

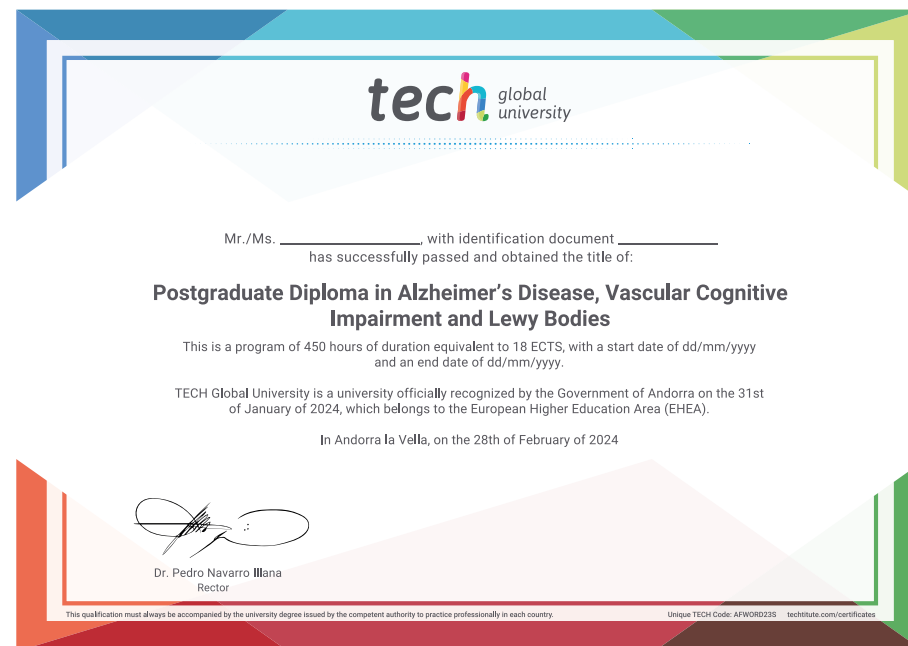
**This TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies**

Modality: **online**

Duration: **6 months**

Accreditation: **18 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.



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



**Postgraduate Diploma**  
Alzheimer's Disease,  
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# Postgraduate Diploma

## Alzheimer's Disease, Vascular Cognitive Impairment and Lewy Bodies

