





# Hybrid Professional Master's Degree

## Dementias

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

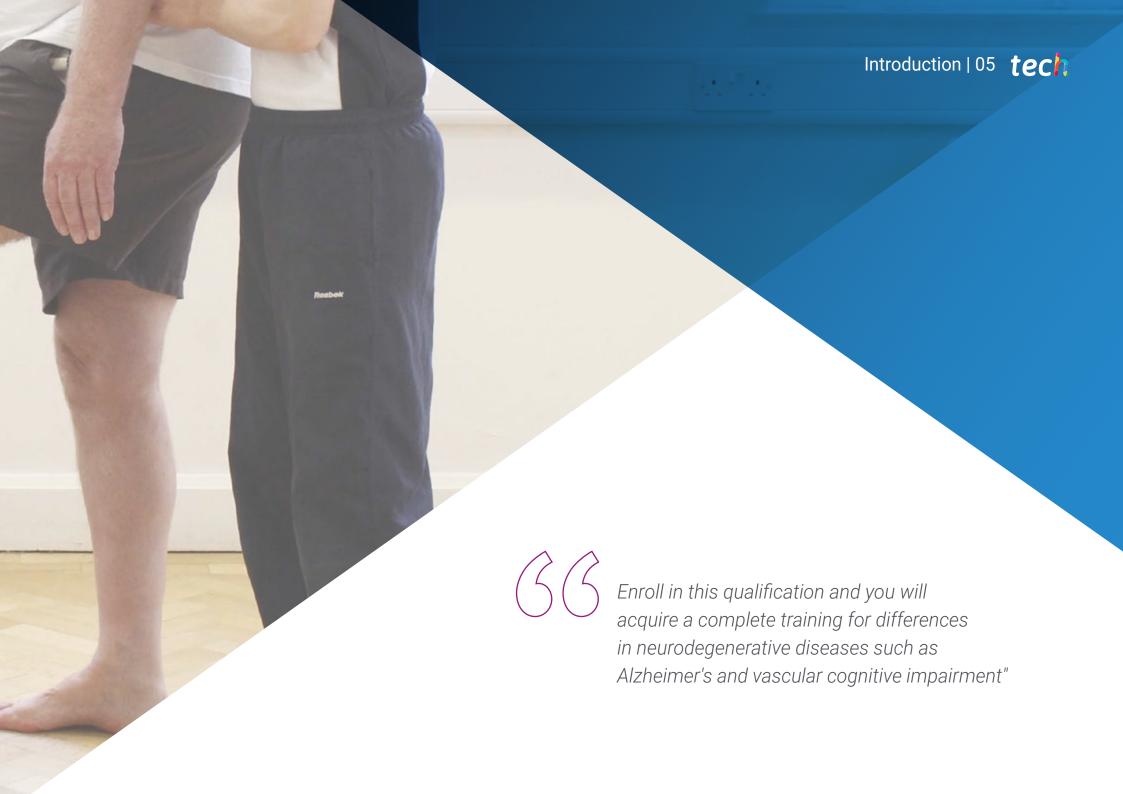
60 + 5 créditos ECTS

We bsite: www.techtitute.com/in/medicine/hybrid-professional-master-degree-dementias

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# tech 06 | Introduction

Chronic diseases, and in particular dementias, are becoming increasingly prevalent as a consequence of the progressive population ageing faced by today's societies. However, despite the fact that organizations such as the World Health Organization attach particular importance to these conditions, many of them are underdiagnosed and underestimated. As a result, disorders are rarely accurately diagnosed and, in turn, are not treated with the most appropriate treatment. Nor do they receive the necessary follow-up and, only on very few occasions, are genetic studies carried out to measure their impact on the family line. For this reason, the different levels of medical care are increasingly calling for highly trained professionals to identify risk factors in patients with signs of neurocognitive impairment, to identify the disease early and to provide the necessary care.

Based on these needs, TECH has created a first class academic program. Thus, the Hybrid Professional Master's Degree in Dementias is composed of two educational moments that will provide different elements to the training of professionals. First, there is a period of theoretical learning through a platform with multiple interactive resources and multimedia products that will strengthen knowledge and update the specialist on disorders such as Alzheimer's, cognitive vascular impairment, Lewy body disease, among others. It will also delve into the latest diagnostic procedures through neuropsychological protocols, biological analysis and clinical imaging tests.

Afterwards, the physician will face a 3-week professional internship in a prestigious healthcare center. During this process, they will have the opportunity to apply all their new skills on real patients and under the careful guidance of the most qualified experts. They will also have an assistant tutor who will be in charge of setting tasks to broaden their skills. Through this stay, TECH graduates will be able to position themselves at the forefront of this health area and offer patients the best guarantees against the most severe dementias.

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

- Development of more than 100 clinical cases presented by professionals of Neurology in particular and Medicine in general
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Comprehensive systematized action plans for the main pathologies faced by patients with dementia
- Presentation of practical workshops on diagnostic and therapeutic techniques for patients with Alzheimer's disease, cognitive vascular impairment, Lewy body disease, among others
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- With a special emphasis on evidence-based medicine and medical research methodologies with respect to dementia disorders
- All of this will be complemented by 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
- Furthermore, you will be able to carry out a clinical internship in one of the best hospital centers



For 3 weeks, you will receive personalized advice from an assistant tutor who will help you to directly handle different real cases of patients with dementia"

## Introduction | 07 tech



A 100% online study stage and an intensive face-to-face stay in prestigious health centers distinguish this study program from other degrees in the educational panorama"

In this Master's proposal, of professionalizing character and hybrid mode, the program is aimed at updating health professionals, dedicated to the care, rehabilitation and readjustment of the social life of patients with dementias. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in the practice of care, and the theoretical and practical elements will facilitate the updating of knowledge and allow decision making in the management of different cases.

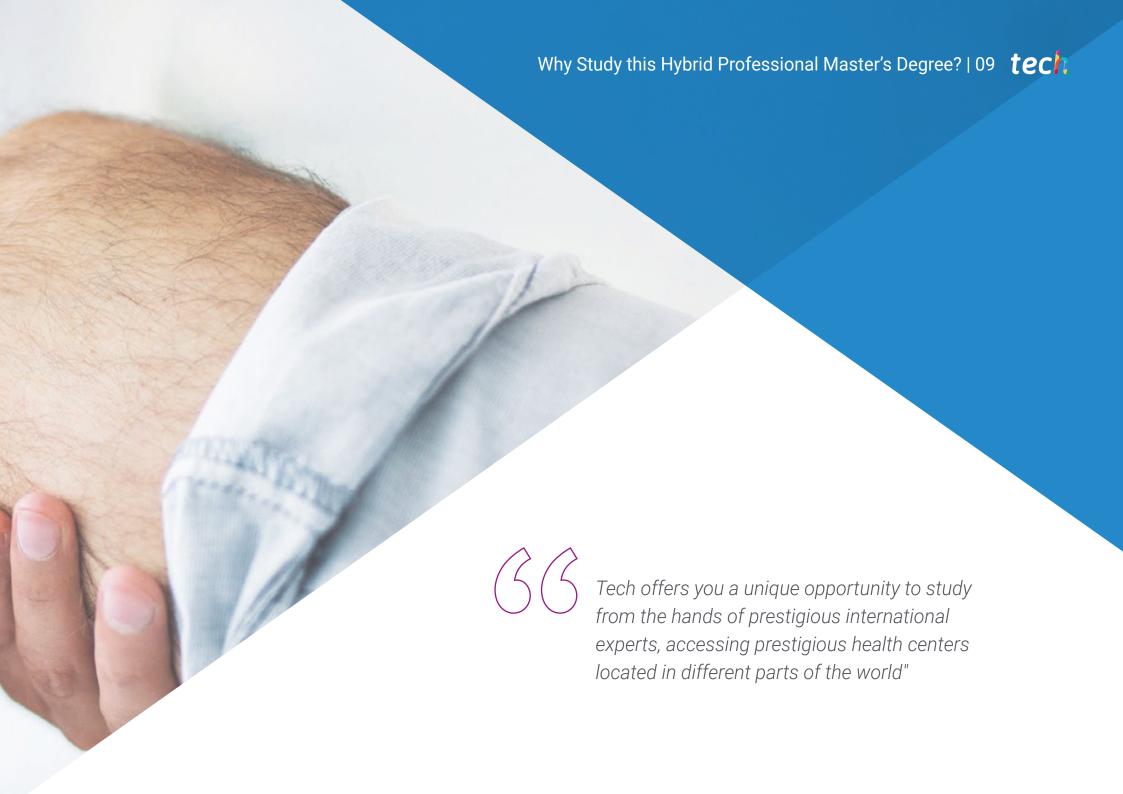
Thanks to its multimedia content elaborated with the latest educational technology, they will allow the medical professional to obtain situated and contextual learning, that is to say, a simulated environment that will provide immersive learning, programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

This syllabus adapts to your schedules and needs, offering you the opportunity to access learning on your own terms and objectives.

This Hybrid Professional Master's Degree has been designed so that, upon completion, you can join the medical vanguard with a complete vision of the most modern diagnostic procedures with respect to dementias.







# tech 10 | Why Study this Hybrid Professional Master's Degree?

#### 1. Update from the latest technology available

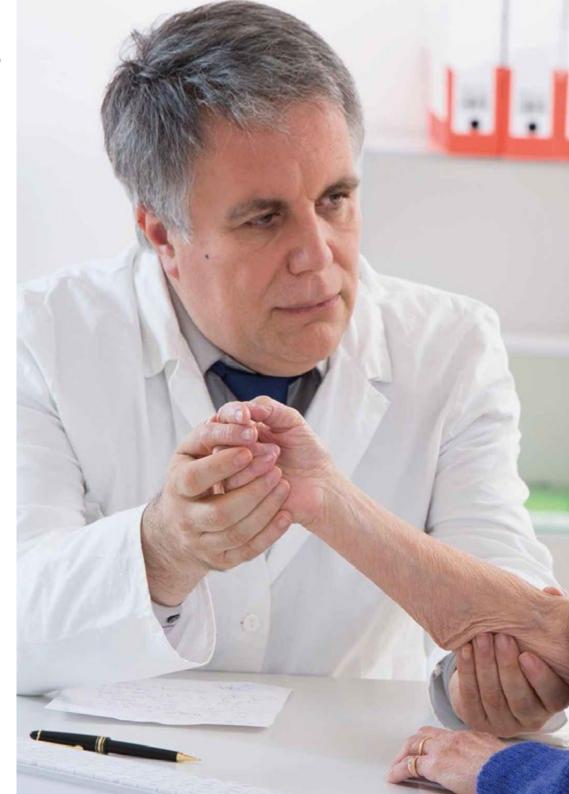
Through this degree, the physician will update their skills regarding the management of the most modern technological tools for the approach of different types of dementias. The study program is distinguished by highlighting the most recent diagnostic resources, their correct application and reading. From this intensive study process, graduates will achieve greater specialization, provide quality health care and increase their prestige.

#### 2. Gain in-depth knowledge from the experience of top specialists

Through this Hybrid Professional Master's Degree, the physician will have access to a teaching staff of excellence. Through them, you will be updated on the latest trends in diagnostic and clinical therapeutic management and the most comprehensive follow-up methodologies for patients with dementia. At the same time, during the practical stay that comprises the second part of this learning model, you will deploy your new knowledge under the careful guidance of the best health experts.

#### 3. Enter first-class clinical environments

After a thorough review of the most prestigious centers in relation to the care of patients with dementia, TECH has chosen those institutions where medical technologies and health personnel come together in an exceptional way. Thus, the specialist will have the best tools and practical advisors at his disposal to acquire a more comprehensive and rigorous update on the most innovative postulates and elements of this health area.





# Why Study this Hybrid Professional Master's Degree? | 11 tech

#### 4. Combine the best theory with state-of-the-art practice

This two-part academic program stands out in the educational landscape for its ability to integrate theoretical knowledge with practical practice. These facilities are made possible by the fact that, in its second stage, the degree includes an on-site stay fully supervised by a renowned tutor, who will assign specific tasks and support the updating of the graduate's skills.

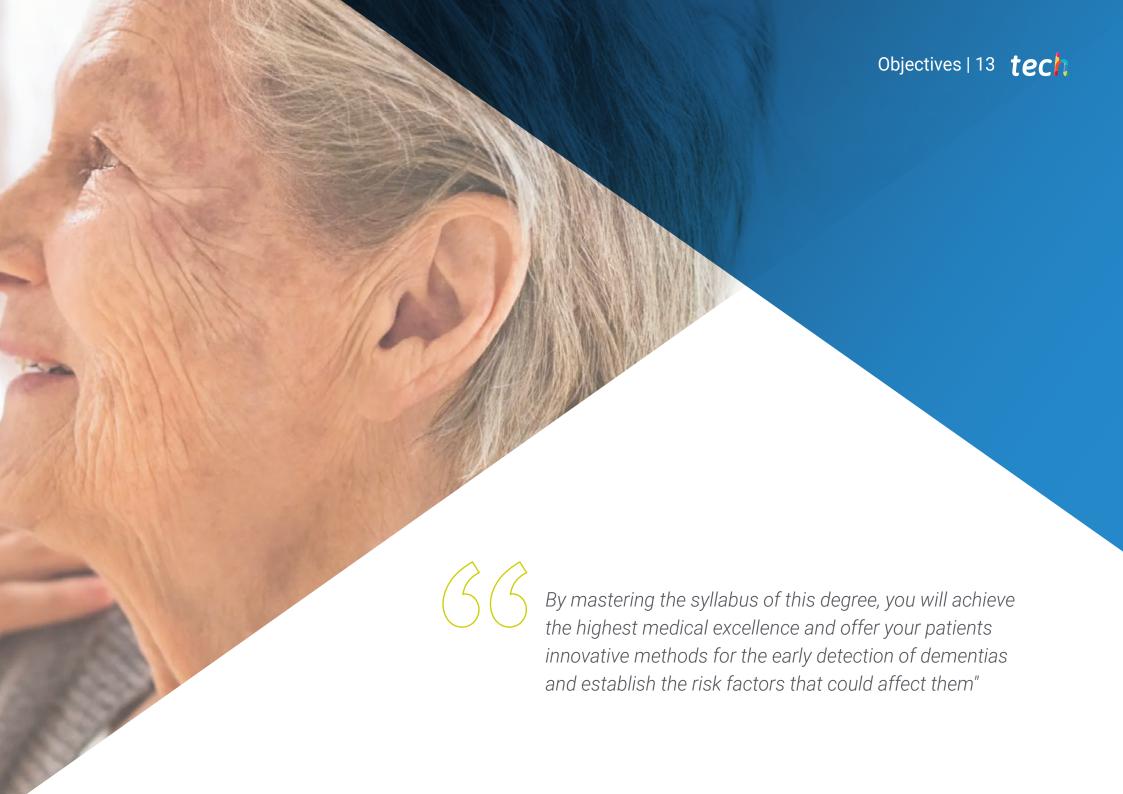
#### 5. Expand the boundaries of knowledge

TECH, as an educational institution of international scope, has access to specialized centers in dementia health care located in different parts of the world. Thus, the physician who opts for this program to get up to date will be able to expand their skills from different frontiers and exercise their knowledge alongside the most recognized experts in the global healthcare scenario.





This Hybrid Professional Master's Degree in Dementias is a reference in the educational panorama due to its updated theoretical and practical contents from the health point of view. This curriculum will drive the doctor towards a more versatile training and adjusted to the use of modern technologies from the clinical care point of view. Likewise, each of the general and specific objectives of this degree will be supervised by professionals with extensive therapeutic and teaching experience who will ensure the specialist a fast, flexible and complete mastery of the latest trends in this area of health.



# tech 14 | Objectives



## **General Objective**

• This program deepens, among other general objectives, in the most up-to-date risk factors about dementias. Particularly, it emphasizes the novelties for prevention, diagnosis and treatment, with special attention to all those clinical, motor, cognitive, dysautonomia and neuropsychiatric symptoms. At the same time, it delves into new techniques for the detection of neurological deterioration with modern imaging tools for structural (computed tomography or magnetic resonance imaging), functional and perfusion and diffusion studies. It also examines the radiotracers available to evaluate specific newly discovered processes





#### Module 1. Alzheimers Disease

- 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 communication of diagnosis and counseling throughout the course of the disease
- Gain knowledge of genetic assessment

#### Module 2. Vascular Cognitive Impairment

- 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
- Know the different aspects of the therapeutic approach to this complex type of dementia (cognition, behavior and non-pharmacological treatments), as well as to acquire the ability to communicate the diagnosis and advise patients and families throughout the disease

#### Module 3. Lewy Body Dementia

- Know their diagnostic criteria, the therapeutic possibilities (balancing the risk-benefits
  of the different approaches), and the interaction of the therapeutic approach with other
  comorbid pathologies in these patients
- Obtain the appropriate training to deal with this complex and exciting disease

#### Module 4. Frontotemporal Dementia

- Learn the diagnostic criteria of all its clinical forms, the diagnostic methods and how to control the different symptoms
- Know how to manage the neuropsychiatric symptoms which present one of the most complex therapeutic challenges within the field of dementias

#### Module 5. Neuropsychology in Dementias

- Know the different neuropsychological assessment instruments in the different cognitive areas (attention, memory, praxis, visuospatial functions, language and executive functions), as well as the main tests to assess the functional and behavioral area in dementias
- Cognitive patterns of dementias (cortical vs. subcortical and frontotemporal vs. parietooccipital), as well as cognitive rehabilitation strategies

#### Module 6. Genetic Assessment in Dementias

 Learn how to perform genetic counseling, decision-making algorithms according to clinical phenotypes and communication of the genetic diagnosis of all dementias covered in the master's degree

#### Module 7. Molecular Neuroimaging in Dementias

- Become familiar with the methodology for performing and reading PET and SPECT molecular imaging in dementia
- Understand the benefits of molecular neuroimaging in the diagnosis of Alzheimer's disease and other neurodegenerative conditions associated with dementia
- Appreciate the role of different PET and SPECT techniques in the differential diagnosis of neurodegenerative disorders
- Know the clinical recommendations for using neuroimaging to support the diagnosis of neurodegenerative disorders with dementia

# tech 16 | Objectives

#### Module 8. MRI in Dementias

- Develop diagnostic algorithms in patients with mild cognitive impairment and in patients with dementia
- Know the different imaging markers in neurodegenerative diseases: qualitative grading of medial temporal atrophy, frontal and parietal atrophy
- Identify global and hippocampal volumetry techniques
- Make an assessment of cerebral perfusion
- Know the MRI semiology of vascular dementia and the main neurodegenerative diseases
- Explore the future prospects for early diagnosis of Alzheimer's disease

#### Module 9. Neuropathology in Dementias

- Extract all the relevant information from a neuropathological report in a case of dementia
- Adequately interpret this information in light of the clinical data available
- Evaluate its possible relevance for the patient's family members

#### Module 10. Rapidly Progressive Dementias

- Obtain sufficient training to deal with the diagnostic process of a patient with rapidly progressing dementia
- Identify the associated symptoms that may suggest a specific etiology, the appropriate use of complementary tests, and if necessary, the most appropriate initial treatment





Module 11. Comprehensive Geriatric Assessment of the Elderly Person Suffering from Cognitive Impairment or Dementia Clinical and Cognitive Comorbidities Some Aspects of the Advanced Planning which Impact the Clinical Evolution

- Understand the basic diagnostic-therapeutic approach to the systemic processes which affect older people with dementia, geriatric syndromes and the approach to other comorbid pathologies in these patients
- Obtain adequate training to be able to deal with the complex interaction of other common clinical situations in elderly patients with neurodegeneration



Acquire the most up-to-date knowledge for the approach to rapidly progressive dementias through the subjects taught in this Hybrid Professional Master's Degree"





# tech 20 | Skills



### **General Skills**

- Perform a diagnosis of dementia and create an appropriate treatment plan
- Understand ways to prevent dementia and risk factors
- Recognize the different symptoms of dementia in their different manifestations and states
- Use different evaluation and diagnostic tools
- Recognize the signs of Alzheimer's and perform a diagnosis of the disease
- Recognize and highlight lesions of neurodegenerative pathologies
- Be capable of performing a holistic intervention in cognitive impairment





- Diagnose Alzheimer's disease using diagnostic biomarkers in an appropriate way
- Apply the appropriate treatment in each phase of the disease
- · Confidently and successfully perform a differential diagnosis of vascular dementia
- Develop preventative protocols for vascular dementia
- Implement an integral therapeutic approach
- Diagnose Lewy Body Dementia
- Be aware of the comorbidity of this condition
- Perform a successful treatment protocol
- Recognize all the symptoms of Frontotemporal Dementia in its different forms
- Know the appropriate management of its symptoms
- Incorporate the use of different neuropsychological assessment tools in the diagnosis of different dementias
- Know how to implement cognitive rehabilitation strategies in these dementias
- Include the genetic aspect of neurocognitive diseases associated with dementia
- Incorporate the results in the diagnosis
- Know how to create algorithms in mild and advanced dementias
- Use different imaging markers as well as global and hippocampal volumetric techniques
- Know how to evaluate cerebral perfusion
- Understand the semiology of MRI
- Know how to optimize the data from a neuropathological report in dementia to help with diagnosis

- Know how to translate the information for the family of the patient
- Diagnose rapidly progressive dementia
- Apply appropriate treatment
- Know how to apply the diagnostic and therapeutic approach and comorbidity of systemic processes in elderly patients with dementia
- Recognize other common situations in elderly patients with neurodegeneration



Enroll in this Hybrid Professional Master's Degree and you will develop the essential skills to apply diagnostic methods based on clinical imaging in patients with varying degrees of dementia"





# tech 24 | Course Management

#### Management



#### Dr. Manzano Palomo, María del Sagrario

- Specialist Physician of the Neurology Service in the Cognitive Pathology Unit of the Hospital Universitario Infanta Leonor
- Coordinator of the Behavioral Neurology and Dementias Group of the Spanish Society of Neurology
- Reviewer of the Journal of Neurology Spanish Society of Neurology
- Associate Professor of Medicine at the Complutense University of Madrid
- Doctorate in Medicine, University of Alcala
- Degree in Medicine from the Complutense University of Madrid
- Credits in the Doctorate in Neuroscience from the Complutense University of Madric
- Advanced Studies Diploma from the Complutense University of Madrid
- MIR Program, Specialty of Neurology at the San Carlos Clinical Hospital
- Member of: Neurogeriatrics Group of the Spanish Society of Neurology, Rotating Committee of the Journal Alzheimer, Realities and Research in Dementia

#### **Professors**

#### Dr. Rábano Gutiérrez del Arroyo, Alberto

- Pathologist Expert in Neurodegenerative Diseases
- Director of the CIEN Foundation Tissue Bank
- Head of the CIEN Foundation Neuropathology Department
- Head of the Alzheimer Center Project
- President of the Spanish Neuropathology Club
- Member of: National Biobanks Network Platform Steering Committee

#### Dr. Álvarez - Linera Prado, Juan

- Head of the Diagnostic Imaging Service of the Ruber Internacional Hospital
- Collaborator in the Chair of Anatomy at the Universidad Autónoma de Madrid
- PhD in Neurosciences, Universidad Autónoma de Madrid
- Graduate of the Magnetic Resonance Imaging in Neuroradiology program at the Ohio State University, United States
- Member of: European Council of Neuroradiology, Spanish Society of Neuroradiology, Spanish Society of Neuroradiology

#### Dr. Ascensión Zea Sevilla, María

- Medical Specialist in Neurology
- PhD in Medicine from the University of La Laguna
- Degree in Medicine and Surgery from the University of Granada
- Master's Degree in Neuro-immunology from the Autonomous University Madrid
- Specialist in Neurology at the University Hospital of Canary
- Member of: Department of Neurology of the Alzheimer's Project Research Unit at the Queen Sofia Foundation, Diagnostic Guidance Unit in Dementias of the Neurological Diseases Research Center Foundation (CIEN) of the Carlos Carlos III Institute of Health, Working Group of the National Biobanks Platform of the Neurological Diseases Research Center Foundation of the Carlos III Institute of Health

#### Dr. Viñuela Fernández, Félix

- Director of the Neurosciences Unit at the Andalusian Neurological Institute of the Victoria Eugenia Hospital
- Coordinator of the Cognitive Impairment Unit of the Virgen Macarena University Hospital Seville
- Graduate in Medicine and Surgery from the Universidad de Navarra
- Specialty of Neurology at the Virgen Macarena University Hospital
- Doctor of Medicine, University of Seville
- Doctor of Philology, University of Seville
- Member and Coordinator of the Spanish Society of Neurology
- Editor and Author of the guide Recommendations for the Management of Cognitive Impairment of the Andalusian Society of Neurology

#### Dr. Toribio Díaz, María Elena

- Specialist in Neurology and Expert in Dementias
- Neurologist at the Hospital Universitario del Henares
- Teacher in postgraduate studies in Medicine
- Treasurer of the Spanish Society of Neurology
- PhD in Medicine from the University Miguel Hernández
- Master's Degree in Movement Disorders from the University of Murcia

#### Ms. Barro Crespo, Ángeles

- Neuropsychologist Expert in Cognitive Impairment
- Coordinator of the Memory Clinic of the Andalusian Neurological Institute of the Nisa Sevilla-Aljarafe Hospital
- Neuropsychologist at Hospital Victoria Eugenia Cruz Roja
- Neuropsychologist at the Neurology Service of the Virgen Macarena University Hospital
- Neuropsychology in the Memory Clinic of the Andalusian Neurological Institute of the Nisa Sevilla-Aljarafe Hospital
- Graduate in Psychology from the University of Seville
- International Master Degree in Clinical Neuropsychology
- Cognitive Assessment and Intervention Expert

## tech 26 | Course Management

#### Dr. Esteve Arrien, Ainhoa

- Specialist in Geriatrics at the Infanta Leonor University Hospital
- Coordinator of the Falls Study Group of the Spanish Society of Geriatric Medicine (SEMEG)
- Specialty in Geriatrics at the Central Hospital of the Red Cross
- Graduate in Medicine and Surgery, University of Malaga
- Master's Degree in Healthcare Management from the International University of La Rioja
- · Master's Degree in Palliative Care from the University of Valladolid
- Diploma in Research Methodology from the Escuela Superior de Sanidad (School of Health)

#### Dr. Muñiz Castrillo, Sergio

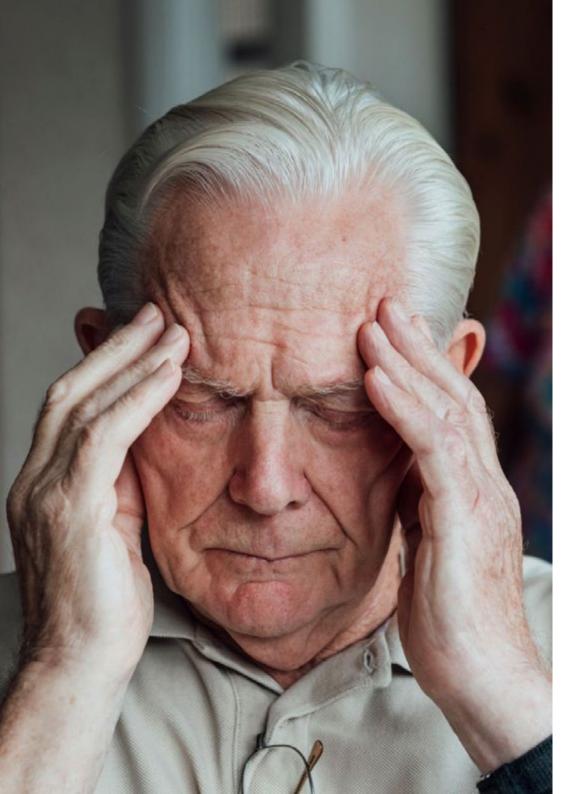
- Neurology Specialist at the National Reference Center for Paraneoplastic Syndromes and Autoimmune Encephalitis of the Hôpital Neurologique France
- Specialist the Infanta Cristina University Hospital
- Specialist at Clínica La Luz
- Specialist at the University Hospital of Torrejón. Ardoz, Spain
- Specialist at the University Hospital of Fuenlabrada
- Degree in Medicine from the University of Oviedo
- Master's Degree in Tropical Neurology and Infectious Diseases from the International University of Catalonia
- Specialty in Neurology at the Clinical Hospital San Carlos
- Stay at the Neurooncology Service of the Reference Center for Paraneoplastic Neurological Syndromes, Hôpital Pierre Wertheimer Hospices Civils de Lyon. France
- Stay at the Department of Neurology, Massachusetts General Hospital. United States

#### Dr. Agüera Ortíz, Luis Fernando

- Chief of Section of the Psychiatry Service at Hospital 12 de Octubre
- Medical Specialist in Psychiatry at Hospital 12 de Octubre
- Consultant in Psychogeriatrics at the Massachussets Institute of Spain
- Senior Researcher of the Multidisciplinary Support Unit of the Alzheimer Project Research Unit of the Queen Sofia Foundation/CIEN
- Author of hundreds of scientific articles
- Author of books on Dementia
- Teacher of university studies on Medicine
- Doctor in Medicine from the Autonomous University of Madrid

#### Dr. Pelegrín, Carmelo

- Chief of the Psychiatry Service at the San Jorge University Hospital
- Consultant of the Pain Unit at the San Jorge University Hospital
- Coordinator of the Eating Disorders Unit at the San Jorge University Hospital
- Professor at the Faculty of Health Sciences of the University of Zaragoza
- Doctor in Medicine from the University of Zaragoza
- Degree in Medicine from the University of Zaragoza
- Member of: Continuing Education Group on Dementias of SEP



# Course Management | 27 tech

#### Dr. Clarimón, Jordi

- Expert Researcher in Alzheimer's Disease and other Dementias
- Principal Investigator of the Genetic Unit of Neurodegenerative Diseases at Sant Pau
- Biofluidics Specialist in Neurological Disorders at Lundbeck A/S
- Postdoctoral stay at the National Institutes of Health in Bethesda and Maryland in the laboratory of Dr. John Hardy
- PhD in Biological Sciences from the University of Pompeu Fabra
- Degree in Biology from the University of Barcelona

#### Dr. Arbizu Lostao, Javier

- Specialist in Nuclear Medicine and Expert in Dementias
- Director of the Nuclear Medicine Service of the University of Navarra Clinic
- Head of the PET and SPECT Imaging Area in Neurology, Neuro-oncology and Endocrinology of the Nuclear Medicine Service of the Clínica Universidad de Navarra
- Head of the Theragnosis Area of the Nuclear Medicine Service of the Clínica Universidad de Navarra
- Researcher in Nuclear Medicine
- Author of hundreds of scientific articles published in specialized journals
- PhD in Medicine and Surgery from the Universidad de Navarra





# tech 30 | Educational Plan

#### Module 1. Alzheimers 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

#### Module 4. Frontotemporal Dementia

- 4.1. Concept
- 4.2. Epidemiology
- 4.3. Diagnostic Criteria
- 4.4. Specificity of Cognitive and Behavioral Symptoms
  - 4.4.1. Cognitive Symptoms
  - 4.4.2. Behavioral Symptoms
- 4.5. Clinical Sub-types
  - 4.5.1. Behavioral Variant DFT
  - 4.5.2. Language Variants
  - 4.5.3. Motor Variants: CBD and PSP
  - 4.5.4. FTD-ALS
- 4.6. Pharmacological Treatment
- 4.7. Non-Pharmacological Treatment

#### **Module 5.** Neuropsychology in Dementias

- 5.1. Neuropsychological Assessment of Attention and Memory
- 5.2. Neuropsychological Evaluation of Language
- 5.3. Neuropsychological Evaluation of Praxis
- 5.4. Neuropsychological Evaluation of Visual-spatial Functions
- 5.5. Neuropsychological Evaluation of Executive Functions
- 5.6. Behavioral and Functional Evaluation
- 5.7. Cognitive Patterns in Dementia
  - 5.7.1. Cortical vs. Sub-cortical
  - 5.7.2. Frontotemporal vs. Parieto-Occipital
- 5.8. Cognitive Rehabilitation
- 5.9. Bibliographic References

#### Module 6. Genetic Assessment in Dementias

- 6.1. Introduction
- 6.2. Genetics in Alzheimer's Disease
  - 6.2.1. Prevalence
  - 6.2.2. Mendelian Genetics
  - 6.2.3. Susceptibility of Genes
  - 6.2.4. Recommendations in Clinical Practice
- 6.3. Genetics in Vascular Dementia
  - 6.3.1. Recommendations in Clinical Practice
- 6.4. Genetics in Fronto-temporal Dementia
  - 6.4.1. Genetics of BVFTD
  - 6.4.2. Genetics in FTD with Parkinsonism
  - 6.4.3. Genetics in FTD-ALS
  - 6.4.4. Genetics of Primary Aphasia
  - 6.4.5. Clinical-Genetic Correlations
  - 6.4.6. Recommendations in Clinical Practice
- 6.5. Genetics of Prion Diseases
  - 6.5.1. Recommendations in Clinical Practice
- 6.6. Diagnostic Algorithm
  - 6.6.1. Diagnostic Algorithm in Alzheimer's Disease
  - 6.6.2. Diagnostic Algorithm in FTD
- 6.7. Genetic Counseling
  - 6.7.1. Concept of Genetic Counseling
  - 6.7.2. Practical Examples PSEN 1 Gene, C90RF72 Gene, AP0E4 Gene, CADASIL Cases, Progranulin Gene

#### Module 7. Molecular Neuroimaging in Dementias

- 7.1. Introduction
- 7.2. Methodological Aspects
  - 7.2.1. Equipment SPECT and PET
  - 7.2.2. Molecular Processes and Radiopharmaceuticals
    - 7.2.2.1. Neuron Activity
    - 7.2.2.2. Dopaminergic Activity
    - 7.2.2.3. Amyloid Deposition
    - 7.2.2.4. Tau Deposit
    - 7.2.2.5. Neuroinflammation
  - 7.2.3. Image Analysis
    - 7.2.3.1. Visual Analysis
    - 7.2.3.2. Comparison with a normality database in surface projections (SSP)
    - 7.2.3.3. Voxel-Based Image Analysis
- 7.3. Neuroimaging of Alzheimer's Disease
  - 7.3.1. Mild Cognitive Impairment and Dementia
  - 7.3.2. Atypical Forms
- 7.4. Neuroimaging in Fronto-temporal Dementia
  - 7.4.1. FTD Variant in Behavior
  - 7.4.2. Primary Aphasias
  - 7.4.3. Others
- 7.5. Neuroimaging of Dementias with Parkinsonism
  - 7.5.1. Lewy Body Dementia
  - 7.5.2. Progressive Supranuclear Palsy
  - 7.5.3. Corticobasal Degeneration
- 7.6. Diagnostic Algorithm
  - 7.6.1. Diagnostic Algorithm in Alzheimer's Disease
  - 7.6.2. Diagnostic Algorithm in FTD and Dementia with Parkinsonism
- 7.7. Case Studies

## tech 32 | Educational Plan

#### Module 8. MRI in Dementias

- 8.1. Introduction
- 8.2. Diagnostic Algorithm
  - 8.2.1. CT and MRI in Cognitive Impairment Evaluation Classification of Dementias
  - 8.2.2. White Matter Evaluation
  - 8.2.3. Gray Matter Evaluation
  - 8.2.4. Advanced Techniques: Perfusion, Diffusion, Spectroscopy, Functional MRI
- 8.3. Potentially Treatable Causes of Dementia
  - 8.3.1. Adult Hydrocephalus, Vascular Injuries
  - 8.3.2. Surgical Injuries: Tumors and Subdural Hematoma
  - 8.3.3. Inflammatory and Infectious Lesions
- 8.4. Alzheimers Disease
  - 8.4.1. Structural MRI: Typical and Atypical Phenotypes
  - 8.4.2. Volumetry: Cortical Thickness and Hippocampi
  - 8.4.3. Perfusion Techniques: Differential Diagnosis
  - 8.4.4. Progression Markers
- 8.5. Vascular Dementia
  - 8.5.1. Small Vessel Disease
  - 8.5.2. Multi-infarct Dementia
  - 8.5.3. Microhemorrhages SWI Imaging
- 8.6. Other Degenerative Dementias
  - 8.6.1. Frontotemporal Dementia
  - 8.6.2. Lewy Body Dementia
- 8.7. Future Perspectives
  - 8.7.1. Functional MRI and Brain Networks
  - 8.7.2. Neuroimaging and Artificial Intelligence

#### Module 9. Neuropathology in Dementias

- 9.1. Introduction
  - 9.1.1. Delimitation of the Scope of the Study
  - 9.1.2. Pathogenic Axis for the Interpretation of Histological Findings
  - 9.1.3. Sporadic vs. Genetic Diseases
  - 9.1.4. Diagnostic Criteria vs. Neuropathological Findings
- 9.2. Levels of Study in Neuropathology
  - 9.2.1. Macroscopic
  - 9.2.2. Histological
  - 9.2.3. Molecular
- 9.3. Alzheimer's Type Pathology
  - 9.3.1. Macroscopic Findings
  - 9.3.2. Characteristics of Histological Lesions
  - 9.3.3. Beta Amyloid Pathology
  - 9.3.4. TAU Pathology
  - 9.3.5. Diagnostic Criteria and Stages
- 9.4. Lewy Type Pathology
  - 9.4.1. Macroscopic Findings
  - 9.4.2. Characteristics of Histological Lesions
  - 9.4.3. Lewy Body Dementia: Stages and Subtypes
  - 9.4.4. Lewy Disease as a Combined Pathology
- 9.5. Tauopathies with Dementia
  - 9.5.1. Molecular Classification of Tauopathies
  - 9.5.2. Progressive Supranuclear Palsy
  - 9.5.3. Argyrophilic Grain Disease
  - 9.5.4. Corticobasal Degeneration
  - 9.5.5. Pick Disease
  - 9.5.6. Other Less Common Tauopathies
  - 9.5.7. Combined Pathology Tauopathies

- 9.6. Pathology TDP-43
  - 9.6.1. FTLD TDP-43 Classification
  - 9.6.2. Sporadic FTLD
  - 9.6.3. Genetics in FTLD
  - 9.6.4. Hippocampal Sclerosis and LATE
- 9.7. Rare FTLD and Other Uncommon Pathologies as a Cause of Neurodegenerative Dementia
- 9.8. Human Prion Diseases
  - 9.8.1. Molecular Pathology of the Prionic Protein
  - 9.8.2. Sporadic Creutzfeldt-Jakob Disease: Molecular Subtypes
  - 9.8.3. Genetic Prionic Diseases
  - 9.8.4. Transmissible Prion Diseases
- 9.9. Cerebrovascular Pathology and Dementia
  - 9.9.1. Basic Lesions and Assessment Strategy
  - 9.9.2. Post-infarction Dementia
  - 9.9.3. Dementia and Small Vessel Pathology
  - 9.9.4. Cerebrovascular Disease as a Combined Pathology

#### **Module 10.** Rapidly Progressive Dementias

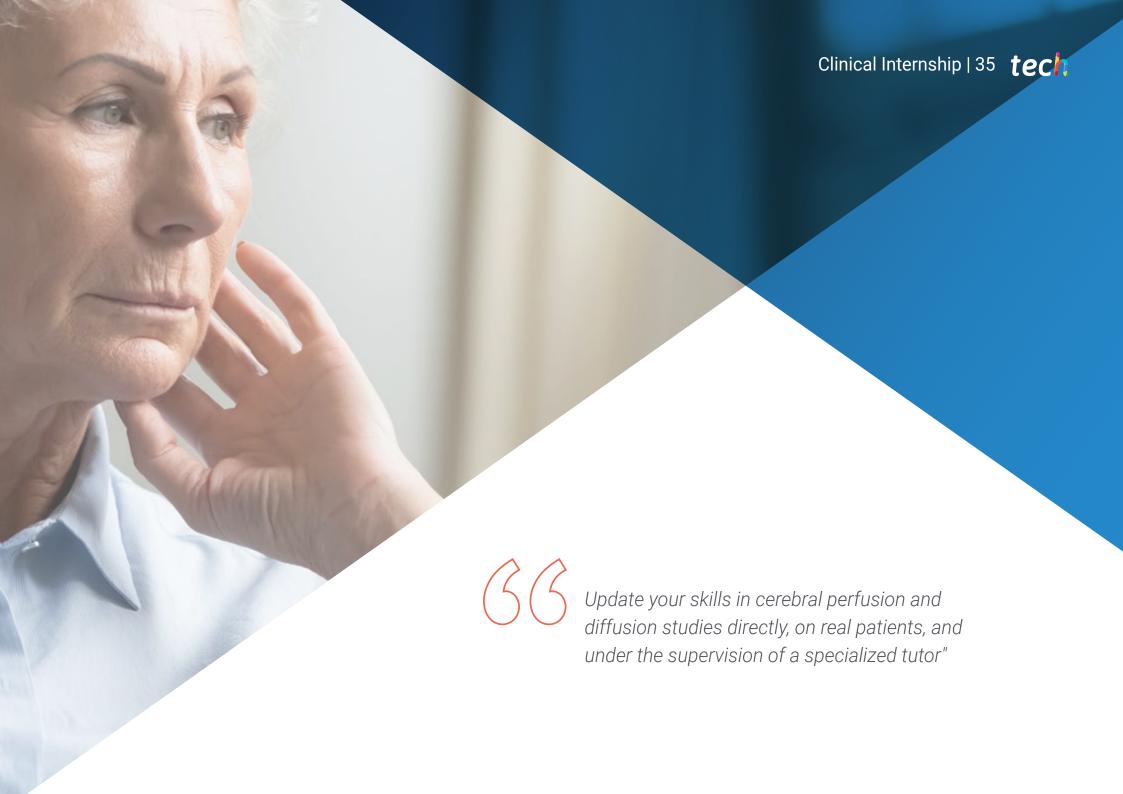
- 10.1. Introduction
  - 10.1.1. Concept
  - 10.1.2. Epidemiology
  - 10.1.3. Differential Diagnosis and Diagnostic Algorithm
- 10.2. Prion Diseases
  - 10.2.1. Sporadic Creutzfeldt-Jakob Disease
  - 10.2.2. Other Prionopathies: Variant CJD, Gerstmann-Sträussler, Fatal Familial Insomnia. etc
- 10.3. Infections
  - 10.3.1. H.I.V
  - 10.3.2. Syphilis
  - 10.3.3. Other Infections of the Central Nervous System (Viral Encephalitis, PML, Subacute-Chronic Meningitis)

- 10.4. Autoimmune Diseases
  - 10.4.1. Antibody-mediated Encephalitis
  - 10.4.2. Hashimoto
  - 10.4.3. Vasculitis of the Central Nervous System
  - 10.4.4. Others (Sarcoidosis, Systemic Vasculitis, etc.)
- 10.5. Oncology Patients
  - 10.5.1. Tumors of the Central Nervous System
  - 10.5.2. Meningeal Carcinomatosis
  - 10.5.3. Yatrogen (Radiotherapy, Intrathecal Chemotherapy)
- 10.6. Toxic-Metabolic
  - 10.6.1. Endocrinopathies
  - 10.6.2. Carential
  - 10.6.3. Mitochondrial
  - 10.6.4. Toxic (Alcohol, Metal, Drugs)

**Module 11.** Comprehensive Geriatric Assessment of the Elderly Person Suffering from Cognitive Impairment or Dementia Clinical and Cognitive Comorbidities Some Aspects of the Advanced Planning which Impact the Clinical Evolution

- 11.1. Introduction. Elderly Patients with Cognitive Impairment Dementia and the Functional Perspective
- 11.2. Comorbidities: Elderly Patients Who Suffer From Comorbid Pathologies Which Influence Neurodegeneration and Comorbid Pathologies Which Are Related to Non-Dementia Cognitive Impairment
  - 11.2.1. Polypharmacy and Overprescription
  - 11.2.2. Falls, Walking and Cognition Joint Evaluation of Both Entities
  - 11.2.3. Frailty and Sarcopenia Prescribed Exercise in Elderly People with Cognitive Impairment
  - 11.2.4. Anorexia, Dysphagia, Weight Loss and Refusal to Eat Interaction with cognitive impairment and clinical evolution
  - 11.2.5. Other Geriatric Syndromes
  - 11.2.6. Considerations of advanced planning of care and decision making in elderly patients who suffer from cognitive impairment and dementia





# tech 36 | Clinical Internship

The second part of this Hybrid Professional Master's Degree in Dementias consists of 3 weeks of face-to-face learning in an international reference center. The specialist will have to complete 8 consecutive 8-hour days, from Monday to Friday, where they will apply the knowledge developed in the theoretical phase and will contribute to the diagnosis and treatment of real patients.

This academic stage will be supervised by an assistant tutor, who will be in charge of assigning new professional tasks and will analyze the correct execution of assistance procedures. At the same time, the physician will have the opportunity to interact with other experts and also learn about their professional methodologies for the approach to dementia patients.

All the knowledge provided by this phase of studies is based on efficiently proven scientific evidence, although many of them are applied in a pioneering way in health institutions linked to TECH. Thus, the graduate will not only acquire a theoretical vision of the latest developments in the sector, but will manage to occupy a distinguished role within the clinical practice at international level.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the practice of medicine (learning to be and learning to relate).





## Clinical Internship | 37 tech

The procedures described below will form the basis of the practical part of the internship, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

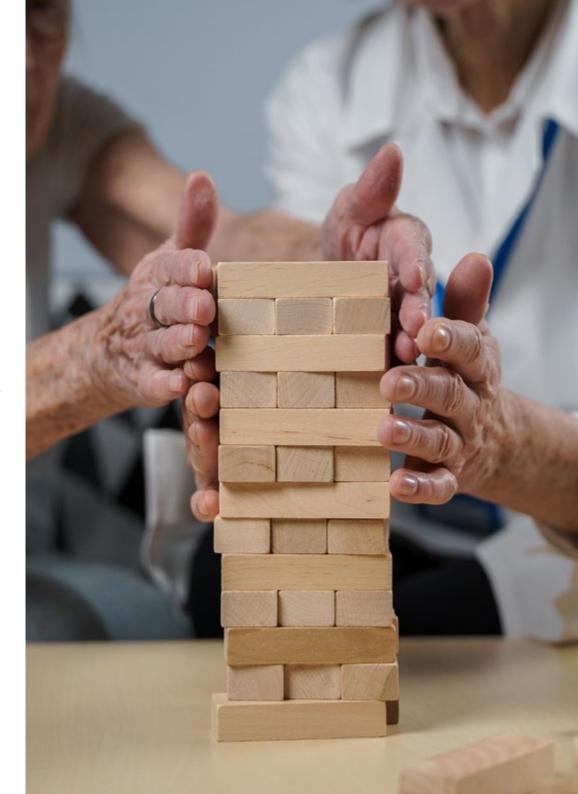
Module	Practical Activity
Trends in neuropsychological assessment of dementias	Apply neuropsychological assessment instruments for cognitive areas related to language, executive and visuospatial functions
	Perform memory, attention and praxis tests to assess the functional and behavioral area of dementias
	Perform memory, attention and praxis tests to assess functional and behavioral areas of dementia
	ldentify neuropsychiatric symptoms associated with dementia through a detailed examination of pathologies such as depression and stress in patients
Genetic and laboratory diagnostic techniques and laboratory techniques for identification of dementia today	Screen for vitamin B12 deficiency by laboratory testing in patients with signs of dementia
	Evaluate underactive thyroid gland in potential patients with dementia
	Appropriate use of diagnostic biomarkers
	Develop genetic diagnostics and deploy decision-making algorithms according to clinical phenotypes
MRI and other protocols of neuroimaging in the detection of dementias	Use various PET and SPECT techniques in the differential diagnosis of neurodegenerative disorders
	Check for evidence of stroke, bleeding, tumor, or hydrocephalus by CT or MRI scans
	Detect patterns of brain activity or the deposition of amyloid protein in the brain in the brain by positron emission tomography
	Determine, by imaging markers, neurodegenerative diseases such as qualitative gradation of medial temporal atrophy, frontal and parietal atrophy
Latest trends in pharmacological and non-pharmacological approach to dementias	Indicate Occupational Therapy as a rehabilitation strategy against dementias
	Implement cognitive stimulation, training and rehabilitation exercises to strengthen the autonomy of the patient with dementia
	Prescribe cholinesterase inhibitors to activate neurotransmitters involved in memory and sense of reality
	Assess the use of antipsychotics, antidepressants, anxiolytics, sedatives or neuroleptics in case of detection of dementia

### **Civil Liability Insurance**

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the internship program period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



### **General Conditions of the Internship Program**

The general terms and conditions of the internship agreement for the program are as follows:

- 1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.
- **2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.
- 3. ABSENCE: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

- **4. CERTIFICATION**: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.
- **5. EMPLOYMENT RELATIONSHIP:** The Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.
- **6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.
- 7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.





### tech 42 | Where Can I Do the Clinical Internship?

The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:



#### Hospital HM Modelo

Country City
Spain La Coruña

Address: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation - Palliative Care



#### Hospital HM Rosaleda

Country City
Spain La Coruña

Address: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Hair Transplantation - Orthodontics and Dentofacial Orthopedics



#### Hospital HM La Esperanza

Country City
Spain La Coruña

Address: Av. das Burgas, 2, 15705, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

Oncology Nursing
 Clinical Ophthalmology



#### **Hospital HM San Francisco**

Country City
Spain León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Update in Anesthesiology and Resuscitation
- Nursing in the Traumatology Department



#### **Hospital HM Regla**

Country City
Spain León

Address: Calle Cardenal Landázuri, 2, 24003, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Update on Psychiatric Treatment in Minor Patients



### **Hospital HM Nou Delfos**

Country City
Spain Barcelona

Address: Avinguda de Vallcarca, 151, 08023 Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Aesthetic Medicine

- Clinical Nutrition in Medicine



#### **Hospital HM Madrid**

Country City
Spain Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Palliative Care

- Anaesthesiology and Resuscitation



#### Hospital HM Montepríncipe

Country City
Spain Madrid

Address: Av. de Montepríncipe, 25, 28660, Boadilla del Monte. Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Palliative Care

- Aesthetic Medicine

### Where Can I Do the Clinical Internship? | 43 tech



#### **Hospital HM Torrelodones**

Country City
Spain Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones. Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation - Palliative Care



#### **Hospital HM Sanchinarro**

Country City
Spain Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation - Palliative Care



#### Hospital HM Nuevo Belén

Country City
Spain Madrid

Address: Calle José Silva, 7, 28043, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- General and Digestive System Surgery
- Clinical Nutrition in Medicine



#### Hospital HM Puerta del Sur

Country City
Spain Madrid

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

Palliative Care
 Clinical Ophthalmology



#### Policlínico HM La Paloma

Country City
Spain Madrid

Address: Calle Hilados, 9, 28850, Torrejón de Ardoz, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

Advanced Operating Room Nursing
 Orthodontics and Dentofacial Orthopedics



#### Policlínico HM Sanchinarro

Country City Spain Madrid

Address: Av. de Manoteras, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Gynecological Care for Midwives
- Nursing in the Digestive Tract Department



#### Policlínico HM Virgen del Val

Country City
Spain Madrid

Address: Calle de Zaragoza, 6, 28804, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Diagnosis in Physiotherapy
- Physiotherapy in Early Care





### tech 46 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

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



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



Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

#### The effectiveness of the method is justified by four fundamental achievements:

- Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.





### Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

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



### Methodology | 49 tech

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

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

## tech 50 | 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 highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Surgical Techniques and Procedures on Video**

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### **Interactive Summaries**

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

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

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

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

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



#### **Testing & Retesting**

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



#### Classes

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

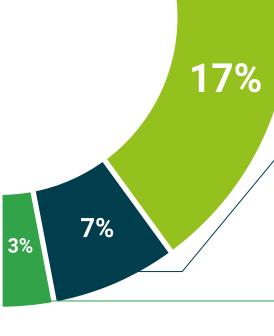
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **Quick Action Guides**

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









### tech 54 | Certificate

This program will allow you to obtain your **Hybrid Professional Master's Degree certificate in 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.

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

Hybrid Professional Master's Degree in Dementiass

This is a program of 1,620 hours of duration equivalent to 65 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

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.

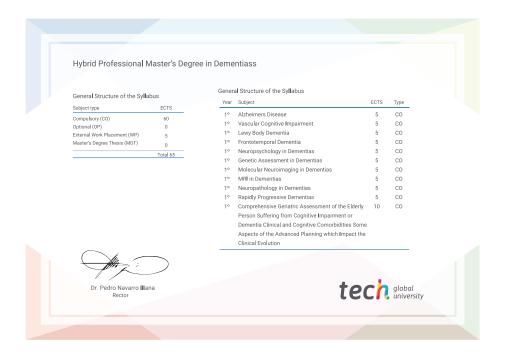
Title: Hybrid Professional Master's Degree in Dementiass

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

Recognition: **60 + 5 ECTS Credits** 



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment



# Hybrid Professional Master's Degree

## Dementias

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 créditos ECTS

