

Postgraduate Certificate Molecular Neuroimaging in Dementias



Postgraduate Certificate Molecular Neuroimaging in Dementias

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/molecular-neuroimaging-dementias

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01

Introduction

The diagnosis of dementias has found in Molecular Neuroimaging techniques the most accurate ally in determining the objective involvement of brain areas in situations of cognitive impairment, both subjective and objective. An in-depth knowledge of how they work and their indications for application, as well as how to interpret the results, is an invaluable resource for the medical professional in this field of work.



A hand is pointing at a medical scan on a grid background. The scan shows a cross-section of a body part, possibly a joint, with various internal structures visible. The background is dark blue with a white grid pattern. The hand is in the bottom left corner, pointing towards the center of the scan.

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A Postgraduate Certificate designed to allow you to combine this training with your daily life as smoothly as possible"

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 training, which is complete and enriching.

Basic concepts will be taught in a developing training 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, training videos, online tutorials, as well as support material, always based on the latest information in the field.

This Postgraduate Certificate in Molecular Neuroimaging in Dementias is an educational project that promises to training high-quality professionals. A program devised by professionals specialized in each specific field who encounter new challenges every day.

After completing this Postgraduate Certificate, 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 Certificate in Molecular Neuroimaging in Dementias** contains the most complete and updated educational program on the market. The most important features of the program 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 the self-assessment process can be carried out 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.



Don't miss the opportunity to study this Postgraduate Certificate in Molecular Neuroimaging in Dementias with us. It's the perfect opportunity to advance your career"



With this Postgraduate Certificate you will be university able update your knowledge and you will obtain a certificate from TECH Technological University"

The audiovisual contents of this Postgraduate Certificate will allow university you to progress quickly, incorporating the contents into your clinical practice immediately

This 100% online Postgraduate Certificate will allow you to benefit from the fastest and easiest way to study in the educational market

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

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is designed around Problem Based Learning, whereby the specialist must try to solve the different professional practice situations that arise during the academic year. 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.



02

Objectives

The **Postgraduate Certificate in Molecular Neuroimaging in Dementias** is aimed at facilitating the performance of the medical professionals by providing them with the latest advances and the most innovative treatments in the sector.



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A qualitative leap of the highest level in your training that you can take wherever and whenever you want"



General Objectives

- ♦ 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

- 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.

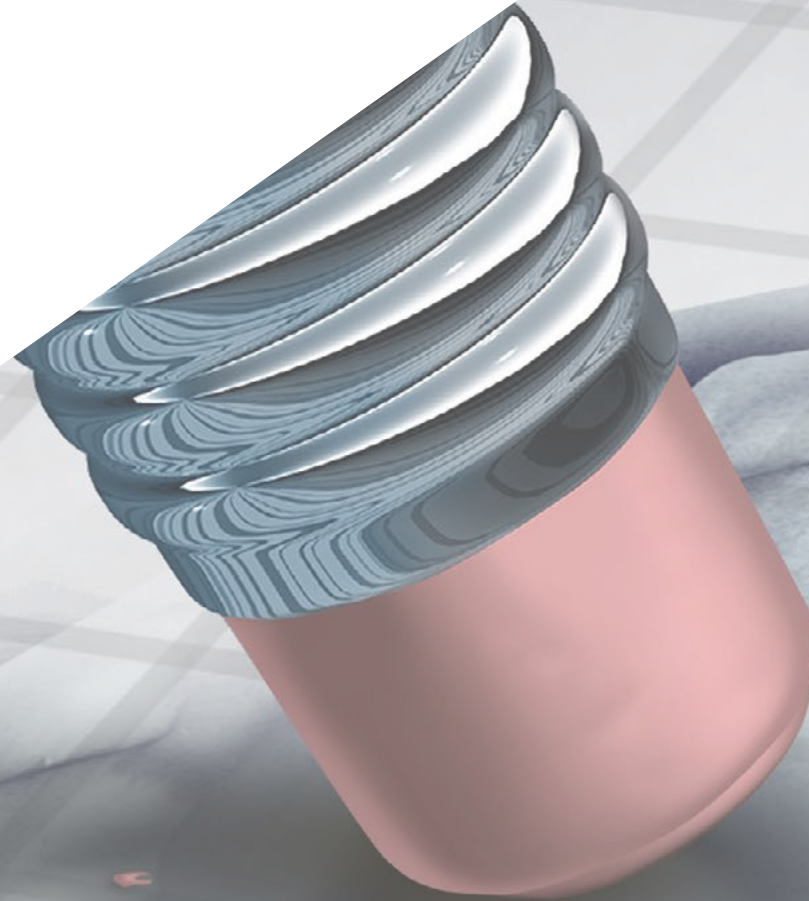
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An opportunity created for professionals who are looking for an intensive and effective course with which to take a significant step forward in the practice of their profession”

03

Course Management

The program's teaching staff includes leading experts in Dementia who contribute their vast work experience to this training 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"

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

Teachers

Dr. Agüera, Luis

- ♦ PhD: Medicine. 1994. Autonomous University of Madrid.
- ♦ Degree: Medicine and Surgery 1983. Faculty of Medicine in Cordoba.
- ♦ Facultative Area Specialist. 12 de Octubre Hospital. Madrid. Since December 1988
- ♦ Head of the Psychiatry Department. 12 de Octubre Hospital. Madrid. Since 2010.
- ♦ Associate Professor of Health Sciences. Department of Psychiatry. Complutense University of Madrid. From 1997 until today.

Dr. Álvarez Linera, Juan

- ♦ PhD in Neurosciences, Autonomous University of Madrid, 2013..
- ♦ Head of of the Diagnostic Imaging Service. Ruber International Hospital Madrid. Since 2018.
- ♦ Associate Professor of the Graduate Program of the Faculty of Psychology, Complutense University of Madrid (UCM). Since 2000.
- ♦ Associate Professor at chairs of Anatomy. Complutense University (UCM). Since 2005.
- ♦ Vice-Secretary of the Spanish Society of Neuroradiology. Since 2014.

**Dr. Arbizu, Javier**

- ◆ Doctor in Neuroimaging. Navarra University. 2003.
- ◆ Degree in Medicine. Navarra University. 1979-1985.
- ◆ Residency in Nuclear Medicine Navarra University Clinic. 1989-1992.
- ◆ Head of Nuclear Medicine Section. Navarra University Clinic.
- ◆ Titular Professor, Department of Nuclear Medicine Navarra University.

Dr. Barro Crespo, Ángeles

- ◆ Degree in Psychology. Faculty of Psychology. University of Seville. 1996-2001.
- ◆ International Master's Degree in Clinical Neuropsychology Higher University Studies. Miguel de Cervantes European University 2010-2012.
- ◆ Neuropsychologist and co-ordinator of clinical trials at the Neurosciences Unit at Victoria Eugenia Hospital (Seville) Since 2017.
- ◆ Neuropsychologist and clinical trials coordinator of the dementia unit of the neurology service at the Virgen Macarena University Hospital(Seville). Since 2005.
- ◆ Neuropsychologist at the Memory Clinic. Neurobrain. Instituto Neurológico Andaluz. Since 2008.

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. April 2013-present.

Dr. Muñiz Castrillo, Sergio

- ♦ Degree in Medicine, University of Oviedo, Asturias 2009.
- ♦ Master's Degree in Tropical Neurology and Infectious Diseases, Universitat Internacional de Catalunya. 2016.
- ♦ Speciality in Neurology Clinical, Hospital San Carlos, Madrid. 2010-2014.
- ♦ National Reference Center for Paraneoplastic Neurological Syndromes and Autoimmune Encephalitis, Neuro-oncology Department, Hospices Civils de Lyon, Hôpital Neurologique Pierre Wertheimer, Lyon, France. Since 2019.

Dr. Pelegrín, Carmelo

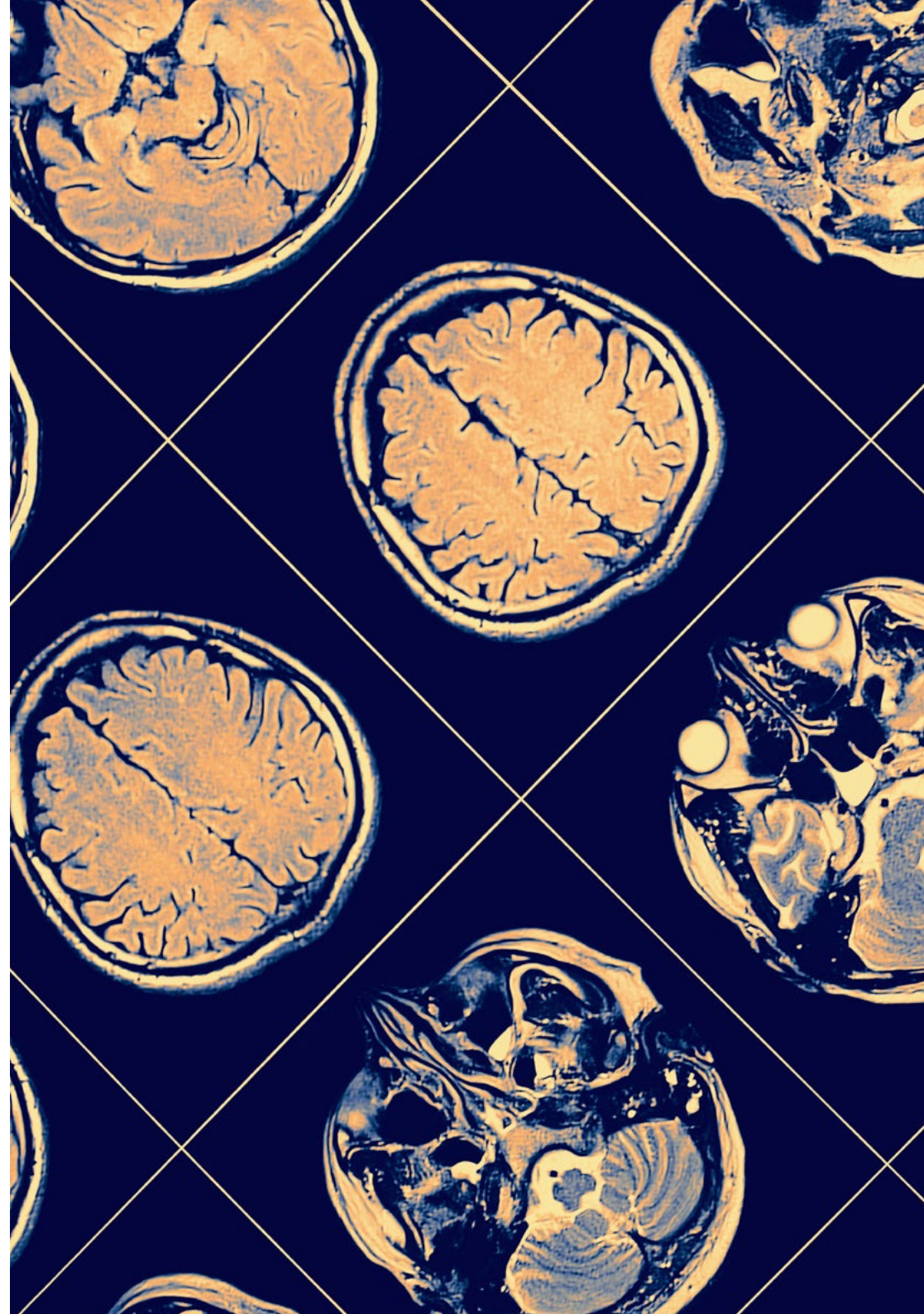
- ♦ Head of Department. Psychiatric Department San Jorge Hospital Huesca

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. Toribio Díaz, María Elena

- ♦ Doctor of Medicine. Miguel Hernández University. Alicante 2009.
- ♦ Degree in Medicine and Surgery. University of Salamanca. 1996.
- ♦ TECH Master's Degree in Movement Disorders Murcia University. 2013-2014.
- ♦ Master's Degree in Medical and Clinical Management National School of Health, Carlos III Health Institute and UNED. 2005-2007.
- ♦ Physician in Neurology Section, Hospital Universitario del Henares.



Dr. Viñuela Fernández, Félix

- Doctor of Medicine. University of Seville. 1997.
- Degree in Medicine and Surgery. Navarra University. Junio1991.
- Director of the Department of Neurosciences (Andalusian Neurological Institute) at the Victoria Eugenia Hospital, Seville.
- Co-ordinator of the Cognitive Impairment Unit at the Virgen Macarena Hospital, Seville.
- Active Member of the Spanish Society of Neurology. Since 1993.

Dr. Ascensión Zea Sevilla, Maria

- 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 Sofía 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.





This Postgraduate Certificate in Molecular Neuroimaging in Dementias contains the most complete and updated scientific program on the market"

Module 1. Neuropsychology in Dementias

- 1.1. Neuropsychological Assessment of Attention and Memory.
- 1.2. Neuropsychological Evaluation of Language.
- 1.3. Neuropsychological Evaluation of Praxis.
- 1.4. Neuropsychological Evaluation of Visual-spatial Functions.
- 1.5. Neuropsychological Evaluation of Executive Functions.
- 1.6. Behavioral and Functional Evaluation.
- 1.7. Cognitive Patterns in Dementia:
 - 1.7.1. Cortical vs. Subcortical
 - 1.7.2. Fronto-temporal vs. Parieto-occipital
- 1.8. Cognitive Rehabilitation
- 1.9. Bibliographic References





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This training will allow you to advance in your career comfortably”

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 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

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, 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 potential 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 professional medical practice.

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

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

1. Students who follow this method not only 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 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.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.



The physician 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

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).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong 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 (we 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



In this program you will have access to the best educational material, prepared with you 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



Interactive Summaries

We present 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, international guides. in our virtual library you will have access to everything you need to complete your training.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through 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 your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



06

Certificate

The Postgraduate Certificate in Molecular Neuroimaging in Dementias guarantees, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Technological University.





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Successfully complete this training and receive your university degree without travel or laborious paperwork”

This Postgraduate Certificate in Molecular Neuroimaging in Dementias contains the most complete and updated scientific program on the market.

After the student has passed the assessments, they will receive their corresponding Postgraduate Certificate issued by TECH Technological University via tracked delivery.

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

Title: Postgraduate Certificate in Molecular Neuroimaging in Dementias

ECTS: 6

Official Number of Hours: 150



*Apostille Convention. In the event that the student wishes to have their paper diploma Apostilled, TECH EDUCATION will make the necessary arrangements to obtain it at an additional cost of €140 plus shipping costs of the Apostilled diploma.

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



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