## Postgraduate Certificate Neurodegeneration and Parkinsonism





## Postgraduate Certificate Neurodegeneration and Parkinsonism

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

Website: www.techtitute.com/us/medicine/postgraduate-certificate/neurodegeneration-parkinsonism

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Certificate

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## 01 Introduction

Parkinson's disease is one of the conditions in which early detection can mean a better prognosis for the patient's lifetime development. In order to be able to act with total solvency in this field, the specialist requires constant and intensive updating. This course provides an answer to this need with the best course on the online teaching market.

A highly specialized course that will provide you with the most advanced skills in the industry.

Add to your specialization a highly specialized course in Neurodegeneration and Parkinsonism, with the confidence of learning from the best professionals in the sector"

## tech 06 | Introduction

Neurodegeneration and Parkinsonism are one of the most commonly diagnosed conditions in the elderly population. The aging of the population is causing the prevalence of these diseases to become very relevant.

In this program you will learn about the fundamental aspects of their management. From the differential diagnosis to the appropriate treatment in each case.

To this end, it will cover in depth the recognition of early signs and symptoms in neurodegenerative movement disorders and associated sleep disorders.

The Postgraduate Certificate in Neurodegeneration and Parkinsonism aims to train with rigor, teach with precision and provide specialization of improvement so that students are able to lead realistic care and teaching programs in the specific area of their professional competencies.

This **Postgraduate Certificate in Neurodegeneration and Parkinsonism** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Development of a Large Number of Case Studies Presented by Experts
- Graphic, schematic, and highly practical contents.
- The latest developments and cutting-edge advances in this area
- Practical exercises where the self-evaluation process can be carried out to improve learning.
- Innovative and highly efficient methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- Content that is accessible from any fixed or portable device with an Internet connection

This course is the best investment you can make to acquire the best and most up-todate training in Neurodegeneration and Parkinsonism" 66

The latest advances in the area of Neurodegeneration and Parkinsonism compiled in a highly efficient course that will optimize your effort with the best results"

The Development of this Course is Focused on the Practice of the Proposed Theoretical Learning Through the most effective teaching systems, proven methods imported from the most prestigious universities in the world, you will be able to acquire new knowledge in a practical way. In this way, TECH is committed to turning its efforts into real and immediate competencies.

Our online system is another of the strengths of our learning proposal. With an interactive platform that has the advantages of the latest technological developments, we put at your service the most interactive digital tools. In this way TECH can offer you a way of learning that is totally adaptable to your needs, so that you can perfectly combine this training with your personal or professional life.

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

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

# 02 **Objectives**

The objective of this course is to offer medical professionals a complete pathway to acquire knowledge, competencies and skills in the area of Neurodegeneration and Parkinsonism and to update on the latest advances in this area of intervention. A practical and effective way to keep you at the forefront of a constantly evolving profession.

Our goal is simple: to help you get the most complete update on Neurodegeneration and Parkinsonism in a course that is fully compatible with your work and personal obligations"

## tech 10 | Objectives



### **General Objectives**

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

An Opportunity Created for Professionals who are looking for an intensive and effective course, with which to take a significant step in the practice of their profession"



## Objectives | 11 tech





### Specific Objectives

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

## 03 Course Management

This comprehensive course on Neurodegeneration and Parkinsonism is taught by leading specialists in the field. Trained in different fields of clinical care and practice, all of them experienced in teaching and research in different areas of the nervous system and with the necessary management knowledge to provide a broad, systematic and realistic vision within the complexity of this area of Neuroscience, this group of experts will accompany you throughout the training, putting their real and up-to-date experience at your service.

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

### tech 14 | Course Management

#### **International Guest Director**

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

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

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

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

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



## Dr. Aguzzi, Adriano

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

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

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## tech Course Management

#### Management



#### Dr. Yusta Izquierdo, Antonio

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

#### Course Management | 15 tech

#### Professors

#### Dr. Carvalho Monteiro, Guilherme

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

#### Dr. Romero Delgado, Fernando

- Assistant Neurology Specialist at the University Hospital of Guadalajara (October 2018-present)
- Consultant Neurologist, Multiple Sclerosis and Other Demyelinating Diseases Monographic Consultation; and Neurology on-call at Sanitas La Moraleja University Hospital (June 2016 - Present)
- On-call contract as Neurology Assistant at Guadalajara University Hospital (February 2018- September 2018)
- Assistant Neurology Specialist at San Carlos Clinical Hospital (August 2017 February 2018)
- Integrated Researcher at the Multiple Sclerosis Unit of the San Carlos Clinical Hospital, through the Foundation for Biomedical Research (June 2017 July 2017)
- Integrated Researcher in the Multiple Sclerosis and Other Demyelinating Diseases Unit at the General University Hospital Gregorio Marañón, through the Foundation for Biomedical Research (July 2015 - May 2017)



## 04 Structure and Content

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

Structure and Content | 19 tech

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

## tech 20 | Structure and Content

#### Module 1. Neurodegeneration and Parkinsonism

- 1.1. Parkinson's Disease
- 1.2. Differential Diagnosis of Parkinsonism
- 1.3. Lewy Body Dementia
- 1.3. Progressive Supranuclear Palsy
- 1.4. Cortico-Basal Degeneration
- 1.5. Taupathias
- 1.6. Multisystem Atrophies
  - 1.6.1. Shy-Drager Syndrome
  - 1.6.2. Oliponto-Cerebellar Atrophy
  - 1.6.3. Striato-Nigric Degeneration
- 1.7. Parkinson-Dementia Syndromes
- 1.8. Huntington's Disease
  - 1.8.1. Clinical manifestations
  - 1.8.2. Pharmacological Management
- 1.9. Hyposmia in Neurodegenerative Disorders
- 1.10. Sleep Disorders in Neurodegenerative Diseases





### Structure and Content | 21 tech

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

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# 05 **Methodology**

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: *Relearning*.

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



Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

## tech 24 | 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.

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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:

 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.

 Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## tech 26 | Methodology

#### **Relearning Methodology**

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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



## Methodology | 27 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 28 | Methodology

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.

20%

15%

3%

15%

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 of this, first hand, and explained and detailed with precision to contribute to assimilation and a better understanding. And best of all, students can watch them as many times as they 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 exclusive educational system for presenting multimedia content 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.

### Methodology | 29 tech



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

Effective learning ought to be contextual. Therefore, we will present students with real case developments in which the expert will guide them through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

20%

7%

3%

17%



#### **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 students 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 Certificate in Neurodegeneration and Parkinsonism guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

## tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Neurodegeneration** and **Parkinsonism** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Postgraduate Certificate in Neurodegeneration and Parkinsonism** Modality: **online** Duration: **6 weeks** Accreditation: **6 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.

tecn global university Postgraduate Certificate Neurodegeneration and Parkinsonism » Modality: online » Duration: 6 weeks » Certificate: TECH Global University » Credits: 6 ECTS » Schedule: at your own pace » Exams: online

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