

# Postgraduate Certificate

## Pharmacological Intervention in Old Age





## Postgraduate Certificate Pharmacological Intervention in Old Age

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

Website: [www.techtitute.com/in/medicine/postgraduate-certificate/pharmacological-intervention-old-age](http://www.techtitute.com/in/medicine/postgraduate-certificate/pharmacological-intervention-old-age)

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# 01

# Introduction

Pharmacological intervention is essential so that elderly people suffering from pathologies can lead as normal a life as possible. This is a field that is constantly advancing, with new drugs appearing every year, some of them experimental. Therefore, TECH wanted to develop a degree that unifies the latest studies in Geriatric Pharmacology and Psychopharmacology. Analyzing, separately, the most common psychopathologies in the elderly and the recommended drugs. In this way, the physician will be able to offer the latest treatments in their practice and increase the quality of care. The contents will be available to the student in online format and without timetables, thus favoring the organization and personal and work conciliation.







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*This program includes a description of the use of the latest drugs for the elderly”*

Although psychotherapies can be very effective in treating certain psychopathologies, in many cases it is necessary to intervene with drugs. In these cases, it is very important to know in depth the contraindications they may have when combined with others. Because the elderly have to use a large number of them simultaneously.

In this sense, the program proposed by TECH begins by highlighting the frailty and vulnerability of the elderly. Defining the particularities of polypharmacy in the elderly.

The most common pharmacokinetic changes in the elderly are listed below. We will go into each of them in more detail and detail their risks. Subsequently, to develop pharmacological treatments recommended for a wide spectrum of psychopathologies such as depression, bipolar disorder or anxiety.

All this, through a 100% online modality, without timetables and with the entire syllabus available from the first day. This allows the student to reconcile work and family life.

This **Postgraduate Certificate in Pharmacological Intervention in Old Age** contains the most complete and up-to-date educational program on the market. The most important features include:

- ◆ The development of case studies presented by experts in geriatric pharmacology
- ◆ 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
- ◆ Practical exercises where self-assessment can be used to improve learning.
- ◆ Its special emphasis on innovative 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



*By following this Postgraduate Certificate, you will have access to the most recent research and studies on geriatric pharmacology"*

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*Throughout this program you will be able to expand your knowledge regarding how decreased body water or protein binding influences drug treatment"*

The program's teaching staff includes professionals from the sector who contribute their work 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 professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Benzodiazepines can be aggressive in the elderly. Enroll and familiarize yourself with the situations in which they are contraindicated.*

*TECH's collection of novel drugs will allow you to bring new and effective solutions to your patients.*





# 02 Objectives

Graduates of the Postgraduate Certificate in Pharmacological Intervention in the Elderly will have an in-depth knowledge of the latest developments in the field of Pharmacology. Whether new drugs or studies on existing drugs. A unique opportunity to increase knowledge of the recommended treatment for the most common psychopathologies in the elderly.





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*Older people tend to have a lower liver metabolism, at TECH, we show you how this affects drug treatment”*



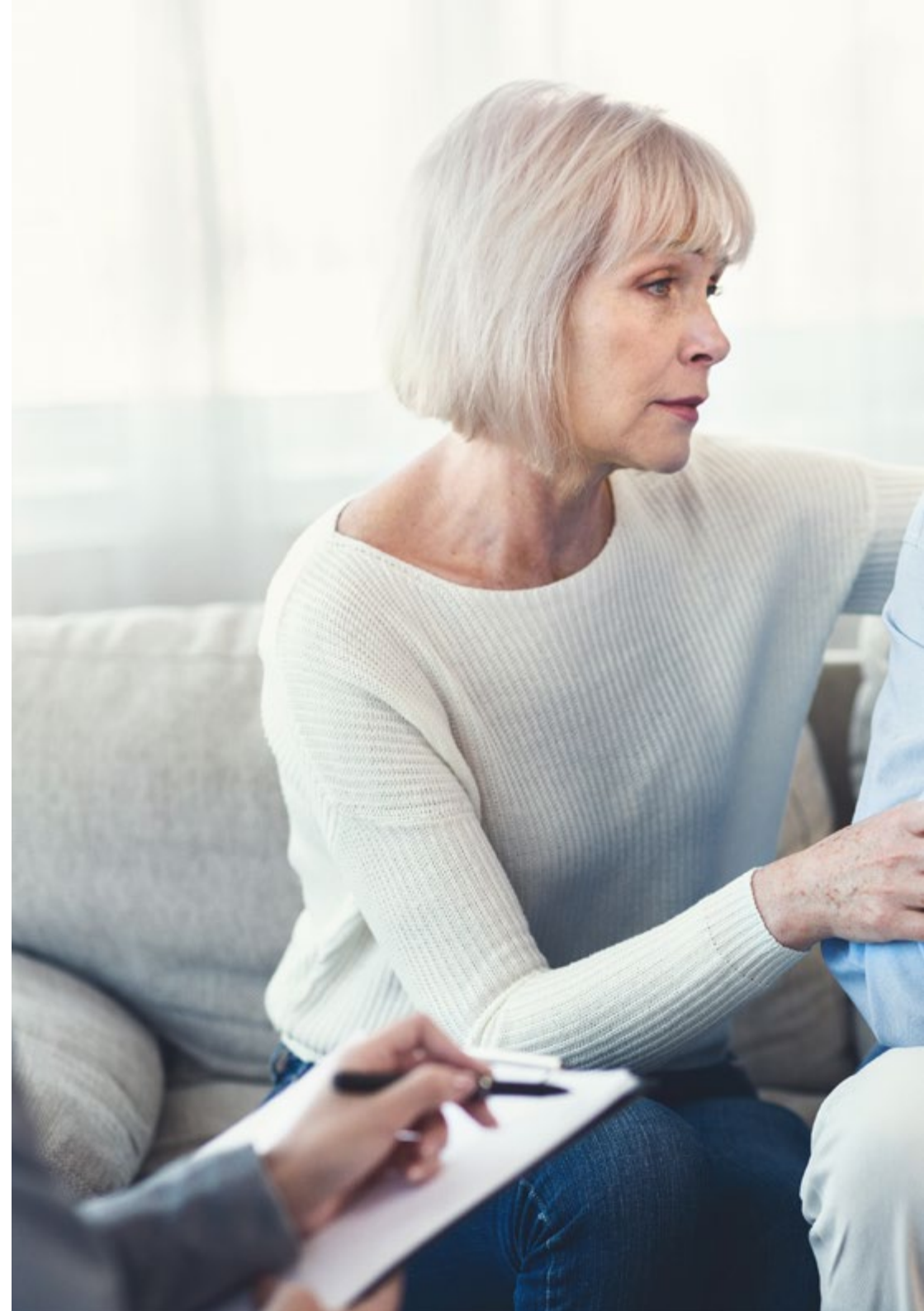
## General Objectives

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- ◆ Understand the changes that are occurring in the way older patients are treated
- ◆ Learn about the latest drugs for the elderly
- ◆ Deepen in the latest research on Geriatric Pharmacology and Psychopharmacology

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*Using antidepressants in the elderly has to be a physician's last resort. However, this program includes a series of indications to identify the situations in which they are necessary”*





## Specific Objectives

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- ◆ Provide an overview of Geriatric Psychopharmacology
- ◆ Understand frailty in the elderly and its pharmacokinetic changes
- ◆ Define the most appropriate and innovative drugs for emotional disorders
- ◆ Define the most appropriate and innovative drugs for agitation and confusion
- ◆ Define the most appropriate and innovative drugs for dementia and impairment
- ◆ Determine the appropriateness of anticonvulsant use in the elderly
- ◆ Analyze pharmacological intervention for somatization



# 03

# Course Management

Throughout the program you will work with prestigious physicians from the best centers in Spain. In addition, TECH has taken into account that these physicians should have experience in the educational field. In this way, not only will we work with updated and quality information, but we will also ensure an effective internalization of the learning process.



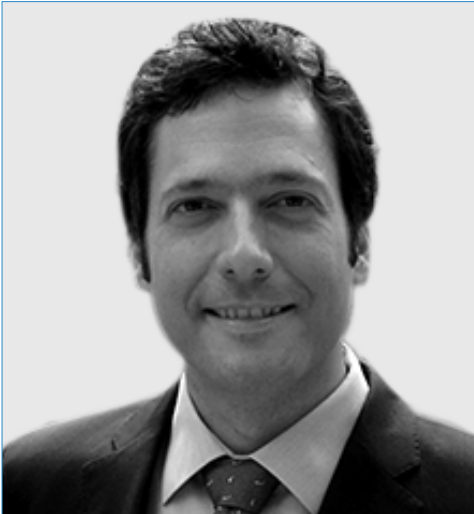




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*At TECH you will be accompanied throughout the learning process by prestigious doctors who will answer any questions you may have"*

## Management



### Dr. Anasagasti, Aritz

- European specialist psychologist in Psychotherapy by the EFPA at the CEP health center in Bilbao
- President of Emotional Network
- Master in Time-Limited Psychotherapy and Health Psychology
- Psychogeriatrics Specialist
- Creator of the homebased intervention.
- Member of the Basque Association of Gestalt Therapy
- Reciprocal Interaction Psychotherapist
- Specialist in neurodegenerative diseases from the Basque Country University.
- Responsible for the computer development of Emotional Management and treatment in the elderly

## Coordination



### Mr. Aguado Romo, Roberto

- Psychologist specializing in Clinical Psychology
- European specialist psychologist in psychotherapy
- Managing Director of evaluation and psychotherapy centers in Madrid, Bilbao, and Talavera de la Reina
- Author of Time-Limited Psychotherapy
- Researcher at CerNet, Emotional Network, and European Institute for Time-Limited Psychotherapies

## Professors

### Dr. Fernández Sánchez, Angel

- ♦ European specialist psychologist in Psychotherapy from the EFPA
- ♦ Health Psychologist. Master's Degree in Clinical and Health Psychology
- ♦ Director of the Evaluation and Psychotherapy Center of Madrid
- ♦ Tutor in charge of the Psychodiagnosis and Psychological Intervention area of the CEP
- ♦ Author of the TEN. technique
- ♦ Head of studies on the Master's Degree in Time-Limited Psychotherapy and Health Psychology
- ♦ Specialist in Clinical Hypnosis and Relaxation

### Dr. Martínez Lorca, Manuela

- ♦ Doctorate in Psychology from the University of Castilla-La Mancha
- ♦ Health Psychologist. Lecturer in the Department of Psychology at the UCLM
- ♦ Master in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapies.
- ♦ Specialist in Clinical Hypnosis and Relaxation

### Dr. Roldan, Lucia

- ♦ Health Psychologist
- ♦ Cognitive-behavioral intervention specialist
- ♦ Master in Time-Limited Psychotherapy and Health Psychology
- ♦ Expert in energy therapy intervention

### Dr. Otero, Verónica

- ♦ European specialist psychologist in Psychotherapy at the CEP health center in Bilbao
- ♦ Head of the children and youth area of intervention with PTL in the CEP of Bilbao
- ♦ Master in Time-Limited Psychotherapy and Health Psychology
- ♦ Child and Adolescent Specialist

### Dr. Zabala Baños, María Carmen

- ♦ Doctorate in Psychology from the Castilla la Mancha University
- ♦ Health Psychologist. Master's Degree in Clinical and Health Psychology
- ♦ Master in Time-Limited Psychotherapy and Health Psychology
- ♦ Psychosocial and Work Rehabilitation Specialist
- ♦ UCLM European specialist psychologist in psychotherapy. EFPA
- ♦ Specialist in Clinical Hypnosis and Relaxation

# 04

## Structure and Content

The syllabus begins with an overview of polypharmacy in the elderly, as well as their frailty and vulnerability. The most common pharmacokinetic changes in the elderly are listed below, with the intention of improving the quality of treatments. Finally, the most appropriate drugs for the most common psychopathologies in the elderly are detailed.







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*The Relearning methodology proposed by TECH allows you to assimilate learning in an adequate manner without the need to dedicate excessive hours to study"*

## Module 1. Pharmacological Intervention in the Elderly

- 1.1. Geriatric Psychopharmacology
- 1.2. Frailty/Vulnerability of the Elderly
- 1.3. Polypharmacy in the Elderly
- 1.4. Pharmacokinetic Changes.
  - 1.4.1. Decrease in Body Water
  - 1.4.2. Reduced Protein Binding
  - 1.4.3. Longer Time to Reach Peak Plasma Levels
  - 1.4.4. Greater Variability in Achieving Stable Plasma Levels
  - 1.4.5. Lower Hepatic Metabolism
  - 1.4.6. Lower Renal Clearance.
  - 1.4.7. Risk of Interactions
  - 1.4.8. New Pharmacodynamics
- 1.5. Pharmacological Treatment of Anxiety in the Elderly
  - 1.5.1. Benzodiazepines
  - 1.5.2. ISRS
  - 1.5.3. NL Atypicals
- 1.6. Pharmacological Treatment for Depression in the Elderly
  - 1.6.1. ISRS
  - 1.6.2. Non-Tricyclic Antidepressants
  - 1.6.3. Dual Antidepressants.
- 1.7. Pharmacological Treatment of Bipolar Disorder in the Elderly
  - 1.7.1. Lithium
  - 1.7.2. Antiseizure Drugs
- 1.8. Antiseizure Drugs
- 1.9. Medications for Agitation in the Elderly
- 1.10. Pharmacology of Confusion
- 1.11. Drugs for Dementia
- 1.12. Anti-Deficiency Drugs.
- 1.13. Pharmacological Intervention in Somatization





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*At TECH you will work with prestigious physicians who will accompany you throughout the learning process”*



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.





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*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"*

## 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:

1. 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.*





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.



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.



# 06 Certificate

The Postgraduate Certificate in Pharmacological Intervention in Old Age guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.







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

This **Postgraduate Certificate in Pharmacological Intervention in Old Age** contains the most complete and up-to-date educational program on the market.

After passing the assessments, the student 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 through the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional or career evaluation committees.

Title: **Postgraduate Certificate in Pharmacological Intervention in Old Age**  
Official N° of hours: **175 h.**



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

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



**Postgraduate Certificate**  
Pharmacological  
Intervention in Old Age

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

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