



# Hybrid Professional Master's Degree

# Rehabilitation Medicine In Geriatrics

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1.620 h

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

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# tech 06 | Introduction

To combat aging and the deterioration of physical and cognitive abilities, geriatric rehabilitation is one of the great allies. The increase in longevity has led to the creation of geriatric prevention and rehabilitation programs for elderly people. Therefore, TECH has combined two effective teaching methods for professionals in Medicine who want to stay up-to-date with advances in Geriatric Rehabilitation Medicine

This program will allow professionals to update their knowledge in Geriatric Rehabilitation Medicine within a patient-centered care context. This includes addressing individuals affected by cognitive impairment, the care of pain and Aging, as well as conditions in Traumatology, Neurology, Pelvic Floor, and respiratory disorders of the elderly. Always from the best evidence and updated science and technology today

Rehabilitation physicians working with elderly patients must have extensive theoretical and practical training to acquire the necessary skills for treating individuals whose physical abilities are affected over the years. To achieve this, there is nothing better than combining theoretical updates with practical experience with real patients, as this is the most ideal way to build expertise in any field, especially when it comes to caring for individuals with specific pathologies and needs

This Hybrid Professional Master's Degree provides access to a comprehensive theoretical curriculum, complemented by numerous online practical cases. Most importantly, students will have the opportunity to work with patients with real needs in a prestigious hospital center, where they will carry out the practical training in the location of their choice, according to a catalog of possibilities. Undoubtedly, this will be a turning point in their career

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

- More than 100 clinical cases presented by professionals Medicine in Geriatrics Rehabilitation and experienced university professors
- 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 Geriatric Patients
- Algorithm-based interactive learning system for decision-making in the presented situations
- Practical clinical guides on approaching different pathologies in elderly patients
- Special emphasis on test-based medicine and research methodologies in Rehabilitation Medicine in Geriatrics
- 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
- Additionally, students will be able to carry out a clinical internship in one of the best hospitals in the best hospital centers



Add to your online study the opportunity to carry out clinical internships in a hospital center that meets the highest standards of quality and technological level"



Take an intensive 3-week internship in a prestigious clinical center and acquire all the knowledge to grow personally and professionally"

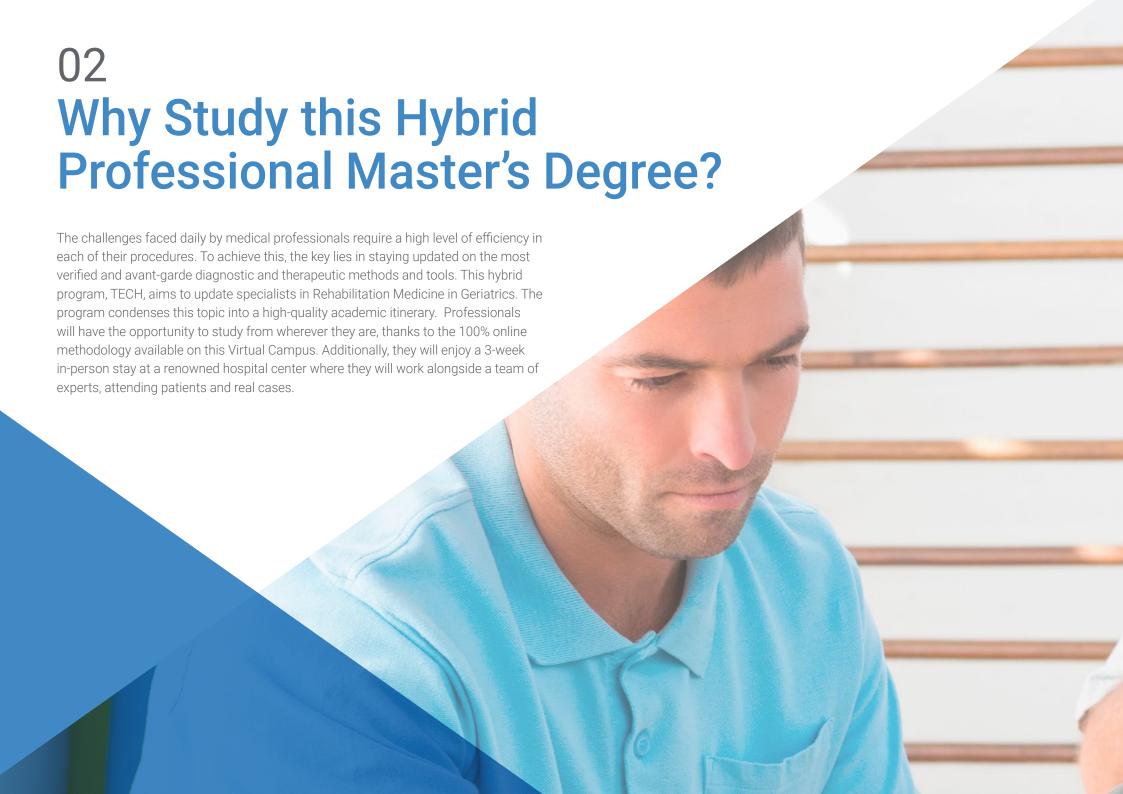
In this Hybrid Professional Master's Degree, with a vocational nature and hybrid learning modality, the program is aimed at updating medical professionals who require a high level of qualification. The contents are based on the latest scientific evidence and oriented in an educational way to integrate theoretical knowledge into medical, and the theoretical-practical elements will facilitate knowledge update and decision-making in patient Address.

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

We offer you the most up-to-date methodology for you to train in a simulated environment and, subsequently, be able to carry out internships in a real center.

At TECH, we take a step forward to enhance your training. We not only offer you the opportunity to study with the best academic program, but we also provide you with a period of intensive interships.







#### 1. Updating from the Latest Technology Available

To focus on the latest advancements in Rehabilitation Medicine, TECH has developed this program using the most effective teaching methodology based on Relearning and leveraging the most advanced technological resources available on this Virtual Campus. Connected to the most modern hospital center, where you will have access to its facilities, allowing professionals to carry out internship program for 3 weeks.

### 2. Gaining In-depth Knowledge from the Experience of Top Specialists

The large team of professionals that will accompany the specialist throughout the practical period is a first-class guarantee and an unprecedented guarantee of updating. With a specifically designated tutor, students will be able to see real patients in a state-of-the-art environment, which will allow them to incorporate the most effective procedures and approaches in and the Assisted Reproduction into their daily practice.

#### 3. Entering First-Class Clinical Environments

The unique experience of immersing oneself in a real-world scenario with the prestige of the best hospital centers nationally and internationally is only possible with TECH program. The graduate will have integrated into a team of professionals in Rehabilitation Geriatric in Medicine to see the day-to-day work of demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in their work methodology.





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

#### 4. Combining the Best Theory with State-of-the-Art Practice

TECH offers a new learning model, 100% theoretical and practical, with the convenience of online study and in-person training that allows you to take the lead in state-of-theart procedures in a real-world setting with geriatric patients, enabling the efficient application of advances in Rehabilitative Medicine alongside a team of knowledgeable experts in the field.

### 5. Expanding the Boundaries of Knowledge

TECH offers the possibility of doing this Internship Program, not only in national, but also in international centers. This way, the specialist will be able to expand their frontiers and catch up with the best professionals, who practice in first class centers and in different continents. A unique opportunity that only TECH could offer.



You will have full practical immersion at the center of your choice"





# tech 14 | Objectives



# **General Objective**

TECH and its team of experts in the clinical field have developed this Hybrid
Professional Master's Degree with the aim of allowing specialists to stay up-to-date
on the most effective guidelines for rehabilitative diagnosis in geriatric patients.
Additionally, they will be able to work on updating their knowledge based on the
latest and most effective treatments for reducing functional impairment, frailty,
and deterioration, thereby favoring the improvement in physical and mental health
in old age.



This program will allow you to delve into the Address of patients with Budd-Chiari Syndrome or portal vein thrombosis"





### **Specific Objectives**

#### Module 1. Clinical Reasoning in Physiogeriatrics

- Explain active aging from the patient's point of view
- Define the fields of action of Physiotherapy in Geriatrics
- Define the role of Physiotherapy in palliative care units
- Define the use of new technologies in Physiogeriatrics
- Explain what interdisciplinary teams in Geriatrics consist of
- Define the composition and functioning of the interdisciplinary team
- Explain the main functions within the interdisciplinary team
- Establish the differential diagnosis. Red & yellow flags
- Describe the major geriatric syndromes
- Explain what Red and Yellow Flagsconsist of
- Define the most commonRed flagsin clinical practice
- Explain the proper approach to the Physiotherapy session in Geriatrics
- Describe the physiotherapeutic examination and assessment of the geriatric patient
- Define the effects on the neuromusculoskeletal system of certain drugs

#### Module 2. Person-Centered Care (PCA)

- Describe the decalogue of person-centered care
- Explain the process of transformation from a service model to a PCA model
- Explain the provision of physiotherapy services in a PCA model



# tech 16 | Objectives

#### Module 3. Understanding Fragility

- Defining fragility from an Integral Vision
- Explain the impact and detection of malnutrition and sarcopenia
- Define the tools for comprehensive geriatric assessment of frailty
- Apply the different frailty assessment scales
- Explain the assessment of frailty in physical therapy.
- Explain the prescription of physical activity in the frail person.
- Develop strategies to implement group dynamics in the fragile or pre-fragile patient.
- Define the risk factors for falls
- Explain specific fall risk diagnostic tests.
- Describe Restraint Methods to Prevent Falls
- · Explain what patient empowerment at discharge consists of
- Defining coordination between levels of care for continuity of care with the community

# Module 4. Professional Approach to the Person Affected by Cognitive Impairment

- Define the risk factors, epidemiology, diagnosis and treatment of cognitive impairment
- Define the risk factors, epidemiology, diagnosis and treatment of Dementia
- Define the types of cognitive impairment: possible classifications
- Define the causes and effects of cognitive impairment
- Describe the therapeutic interventions from the physiotherapy point of view.
- Describe strategies to promote family adherence to treatment
- Define strategies to access the disoriented and/or disconnected user
- Explain the application of music as a tool for working with people with dementia. with dementia

- Define the origin, indications and basic principles of basal stimulation
- Define the advantages of basal stimulation
- Define Community intervention in physiogeriatrics

#### Module 5. Pain and Aging, Update on Current Scientific

- Explain the anatomy and physiology of pain transmission
- Define the different types of pain
- Describing pain and aging from a biopsychosocial paradigm
- Define the different pain syndromes in geriatrics
- Explain how to perform a proper pain assessment
- Explain the pharmacological treatment of pain in the geriatric patient
- Explain the physiotherapeutic treatment of the geriatric patient

### Module 6. Updating in support devices for the autonomy of people

- Define and classify the different assistive devices for activities of daily living
- Define and classify the different pressure relieving devices for the prevention of pressure ulcers
- Explain the novelties in the different devices designed to facilitate mobility and correct positioning
- Explain the application of accessibility and architectural barrier removal support products
- Define new technology for the creation of low-cost support products



# Module 7. Physiotherapy in traumatology, neurology, pelvic floor and respiratory disorders in the elderly. Searching for Evidence

- Define the role of physiotherapy in fractures and dislocations in the older adult
- Explain the main fractures in the elderly and their physiotherapeutic treatment
- Explain the main dislocations of the elderly and their physiotherapeutic treatment
- Explain the role of physiotherapy in hip, knee and shoulder arthroplasty
- Define the role of physiotherapy in osteoarthritis and rheumatoid arthritis
- Describe the role of Physiotherapy in the amputee patient
- Define the role of the physical therapist in the prosthetic rehabilitation program
- Explain the recommendations for long-term Address of the amputee patient
- Define the physiotherapeutic approach to the acute, subacute and chronic stroke patient
- Describe the Address of common complications in the stroke patient
- Explain new trends in physical therapy for patients with Parkinson's disease
- Define the role of the physiotherapist in urinary incontinence and chronic urinary retention
- Explain what respiratory physiotherapy in COPD consists of
- Explain what respiratory physiotherapy in neurological conditions consists of
- Define communication as a tool for successful treatment in physiotherapy

#### Module 8. Tools for Daily Practice in Geriatrics

- Define the basis of communication with the elderly person
- Explain the communication difficulties associated with Gerontological Syndromes
- Explain the professional's approach to bereavement.





# tech 20 | Skills



### **General Skills**

- Possess knowledge and understanding that provides a basis or opportunity to develop and/or apply original ideas, often in a research context
- Apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the field of study
- Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- Know how to communicate their conclusions and the ultimate knowledge and reasons behind them to specialized and non-specialized audiences in a clear and unambiguous manner
- Acquire the learning skills that will enable further studying in a largely self-directed or autonomous manner





- Define the current situation of Rehabilitation Medicine in geriatrics
- Define the concept of active aging
- Explain active aging from the patient's point of view
- Describe the role of the rehabilitation physician in active aging programs
- Define the fields of action of Rehabilitation Medicine in Geriatrics
- Describe strategies to promote family adherence to treatment
- Define strategies to access the disoriented and/or disconnected user
- Explain the application of music as a tool for working with people with dementia. with dementia
- Describe the use of animal-assisted therapy (AAT)
- Explain the use of yoga and mindfulness in geriatrics
- Define the origin, indications and basic principles of basal stimulation
- Define the basis of communication with the elderly person
- Explain the communication difficulties associated with Gerontological Syndromes
- Explain the professional's approach to bereavement
- Describe the use of ICT as a possible ally in the treatment of the elderly person, the interdisciplinary team and the caregiver/family nucleus

- Define the use of technology in aging
- Describe the decalogue of person-centered care
- Define the PCA model
- Explain the process of transformation from a service model to a PCA model
- Explain the provision of physical therapy services in an ACP model



You will be up to date to address geriatric patients in various intervention areas and care levels thanks to this program"





### International guest conductor

Dr. Tracy Friedlander is an eminent international expert, specialized in Physiotherapy and Rehabilitation of the elderly. Her extensive knowledge and skills in this field have enabled her to implement innovative procedures and improve the quality of life of various patients over the years.

Thanks to her high level of care, the scientist has been selected as Medical Director of the Comprehensive Acute Inpatient Rehabilitation Unit at Johns Hopkins Bayview Medical Center. She has also been part of the medical teams at the prestigious Johns Hopkins Hospital.

Her main area of expertise is Neurological Rehabilitation. In this field, the expert has scientific publications referenced in peer-reviewed journals of high impact in the health community. As such, she has focused her efforts on helping patients to control Spasticity, a muscle control disorder, through various therapeutic approaches.

In addition, some of her most outstanding research in recent years is related to the rehabilitation of patients subjected to long periods of mechanical ventilation when infected with the SARS-CoV-2 virus. She is also fully qualified to treat joint pain, fibromyalqia and chronic pain and fatique.

Dr. Friedlander also holds official certifications from the American Board of Physical Medicine and Rehabilitation. All of this is backed by her excellent knowledge in the precise and advanced care of spinal cord injuries. On the other hand, this specialist has an excellent academic background. She graduated from Emory University in Atlanta and obtained her medical degree from the University of Maryland. She also completed her internship at Mercy Medical Center and her residency in Physical Medicine and Rehabilitation at Sinai Hospital in Baltimore.



# Dr. Friedlander, Tracy

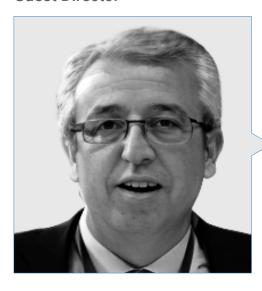
- Director of the Department of Physical Medicine and Rehabilitation at Johns Hopkins Hospital.
- Medical Director of the Comprehensive Acute Inpatient Rehabilitation Unit at Johns Hopkins Bayview Medical Center
- Specialist in Neurorehabilitation and Spasticity Management
- Official certifications from the American Board of Physical Medicine and Rehabilitation
- Specialist in Physical Medicine and Rehabilitation at Sinai Hospital of Baltimore
- Medical Graduate from the University of Maryland, Baltimore
- Member of:
- American Academy of Physical Medicine and Rehabilitation
- American Spinal Cord Injury Association
- Maryland Society for Physical Medicine and Rehabilitation



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

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#### **Guest Director**



### Dr. Castillo Martín, Juan Ignacio

- Head of Physical Medicine and Rehabilitation Department at Doce de Octubre University
- Doctor Specialist in Physical and Rehabilitation Medicine, Hospital Complex Ruber Juan Bravo
- Rehabilitation Physician at the Traffic Accidents Unit of the Ruber Juan Bravo Hospital Complex
- Rehabilitation Physician at Recoletas Cuenca Hospital
- Coordinator of continuing education of the Spanish Society of Cardiology in Exercise Testing with Oxygen Consumption
- Associate Professor in UCM of the Faculty of Medicine
- Teaching coordinator in continuing education courses at the Health Department of the Community of Madrid: Tertiary prevention in chronic cardiopathic patients. Cardiac Rehabilitation
- Degree in Medicine and Surgery. University of Salamanca.
- Master's Degree in Cardiac Rehabilitation. SEC-UNED
- Master in and Disability Assessment UAM
- Master in Child Disability. UCM
- PhD in Neuroscience. University of Salamanca
- Member of the Spanish Society of Cardiology

### Management



### Dr. García Fontalba, Irene

- Manager and Physiotherapist in Cal Moure'S
- Member of the Girona Territorial Section of the Association of Physiotherapists of Cataluña
- Creator of the blog "fisios y otras historias"
- Coordinator of the social networks group of professionals for health promotion in Girona.
- More than ten years working in geriatric pathology and processes involving pain at home and in private practice

### **Professors**

#### Dr. Buldón Olalla, Alejandro

- Expert in Physical Activity and Sport Physiotherapy
- Physiotherapist in the Amavir group and in home care for the elderly
- Founder of the blog fisioconectados.com
- Expert in Physical Activity and Sport Physiotherapy Rey Juan Carlos University
- Diploma in Physiotherapy, Rey Juan Carlos University
- Master's Degree in Social Networks and Digital Learning

#### Dr. Gómez Orta, Roger

- Physiotherapist and Orthopedic Technician
- Physiotherapist and Orthopedic Technician at Quvitec Centre D´Ajudes Técniques
- Co-founder of Quvitec.
- \* Responsible for the seating and positioning clinic service at Quvitec
- Specialist and trainer in patient Address of Handicare products in Spain
- Diploma in Physiotherapy, EUIF Blanquerna

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#### Dr. Díaz Zamudio. Delia

- Specialist in Rehabilitation and Physical Medicine
- Resident Intern of Rehabilitation and Physical Medicine in the Rehabilitation Service of the University Hospital 12 de Octubre
- Assistant specialist in the Rehabilitation Service of the 12 de Octubre University Hospital.
- Honorary Collaborator of the Department of Physical Medicine and Rehabilitation and Hydrology at 12 de Octubre Hospital.
- Degree in Medicine and Surgery. Faculty of Medicine. University of Seville
- Rehabilitation and Physical Medicine Specialist, Rehabilitation Service, University Hospital of Denia.
- Rehabilitation and Physical Medicine Specialist, Rehabilitation Service of the University Hospital Alto Deba, Mondragón
- Dr. González García, María Dolores
- Specialist in Physical Medicine and Rehabilitation
- Head of Neurologic Rehabilitation Service. 12 Octubre Hospital, Madrid
- \* Area Specialist Physician, Doce de Octubre Hospital, Madrid
- Degree in Medicine and Surgery by the University of Alcalá. Alcalá de Henares, Madrid
- Specialization in Physical Medicine and Rehabilitation as resident intern (MIR) in the Rehabilitation Service at the University Hospital 12 de Octubre, Madrid

#### Dr. Cuesta Gascón, Joel

- Doctor in Physiotherapy and Rehabilitation
- Doctor in Physiotherapy and Rehabilitation. La Paz University Hospital, Madrid
- Doctor in Physiotherapy and Rehabilitation. Medical and Rehabilitation Center Dr. Rozalén, Madrid
- Resident of Physical Medicine and Rehabilitation at the University Hospital 12 de Octubre,
- \* Rehabilitation Physician at Medicine Repair
- Teacher of the Specialization Course in Neuropathic Pain at La Princesa Hospital
- Organizer and speaker at "See you on the 12th" and "Fundamentals and Physiology of Sports" Conference
- Speaker at " AMIR 2020 Academy postMIR Conference" on the specialty of Physical Medicine and Rehabilitation
- Master's Degree in Clinical Medicine, Francisco de Vitoria University
- Degree in Medicine from the Camilo José Cela University.
- Expert in Musculoskeletal Ultrasound

#### Dr. Jiménez, Henar

- Specialist in Physiotherapy and Sports Rehabilitation
- \* Resident Intern. 12 de Octubre University Hospital, Madrid
- Degree in Medicine
- Expert in Physiotherapy and Sports Rehabilitation at the International University Isabel I de Castilla
- \* Course on the Safe Use of Medication in the Madrid Health Service

#### Dr. Pino Giráldez, Mercedes

- · Specialist in Physical Medicine and Rehabilitation
- \* Assistant Rehabilitation Physician at University Hospital 12 de Octubre, Madrid
- Specialist in Physical Medicine and Rehabilitation at University Hospital of Guadalajara.
- \* Assistant Rehabilitation Physician at Rey Juan Carlos I Hospital, Madrid
- Assistant Rehabilitation Physician at Torrejón de Ardoz Hospital
- Assistant Rehabilitation Physician at the University Hospital of Guadalajara
- \* Medical Rehabilitation Specialist at the Jiménez Díaz Foundation Hospital
- Degree in Medicine and Surgery from the University of Alcalá de Henares
- \* Specialist in Childhood Disability by Complutense University of Madrid
- MIR Physical Medicine and Rehabilitation

#### Dr. Blesa Esteban, Irene

- Resident Intern. 12 de Octubre Hospital
- Expert in musculoskeletal ultrasound
- Graduate of the Faculty of Medicine at the Autonomous University of Madrid.
- Course on Neuropathic Pain Address for Medicine
- · Course on Evaluation and prescription of therapeutic exercise.
- Course in Life Support for Residents
- Supervision of doctoral thesis: Diagnosis of congenital heart disease in the first trimester of pregnancy ultrasound

#### Dr. García, Sofía

- Specialist in Physical Medicine and Rehabilitation, Madrid Service of Health
- Specialist in Physical Medicine and Rehabilitation, Children's Rehabilitation Unit, University Hospital 12 de Octubre, Madrid
- \* Specialist in Physical Medicine and Rehabilitation, Language Rehabilitation Center
- Medical Specialist in the Pelvic Floor Unit of the University Hospital 12 de Octubre
- Specialist Physician in Cardiac Rehabilitation in the Cardiac Rehabilitation Unit of the 12 de Octubre University Hospital.
- Specialist Physician in Facial Paralysis and Neurorehabilitation Unit at La Paz University Hospital
- Medical Specialist of the Neurorehabilitation Unit at the 12 de Octubre University Hospital
- Specialist Physician in Respiratory Rehabilitation at Gregorio Marañón General University Hospital
- Specialist Physician in Rehabilitation in Spinal Cord Injury at the National Hospital of Paraplegics
- Degree in Medicine, San Pablo University School of Medicine
- Master's Degree in Musculoskeletal Ultrasound and Ultrasound-Guided Interventionism at CEU San Pablo

# tech 30 | Course Address

#### Dr. Soto Bagaria, Luis

- Physiotherapist Researcher at Vall d' Hebron Research Institute
- Physiotherapist and researcher at Parc Sanitari Pere Virgili
- Physiotherapist and Collaborator in the R & D department, SARquavitae
- Responsible researcher at Mapfre Quavitae for the PhD in Public Health and Research Methodology
- Master's Degree in Neuromusculoskeletal Physiotherapy
- \* Master's Degree in Clinical Research. International University of Catalonia
- Member of the research team on aging, frailty and transitions at Re-Fit BCN

#### Dr. Gil Gracia, Samuel

- Physiotherapist and Osteopath
- Physiotherapist and Osteopath in free practice in Béziers
- Physiotherapist. Iriteb Center c / Dos de Mayo in Badalona
- Member of: the Spanish Society of Physiotherapy and Pain SEFID, Society Fisioterapia sin Red
- Author of the videoblog Soy Paciente de Samu, a channel of divulgation on physiotherapy
- Specialized in Musculoskeletal Pain
- Master's Degree in Osteopathy at the Escoles Universitaries Gimbernat
- Diploma in Physiotherapy at the Escoles Universitaries Gimbernat





#### Dr. Jimenez Hernández, Daniel

- Expert in Physiotherapy and Education
- Physiotherapist
- Trainer of Person-Centered Care professionals
- Professor at the Central University of Catalonia
- Doctor in Education from the Central University of Catalonia
- Official Master's Degree in Inclusive Education. Central University of Catalonia
- Diploma in Physiotherapy Gimbernat University School, EUG-UAB
- Member of the research group of attention to diversity and Mental Health and Social Innovation of the UVic

### Dr. Hernandez Espinosa, Joaquín

- Specialist in Respiratory Physiotherapy
- Director of Residential Center Hotel Senior Citizens Pineda
- Postgraduate in Respiratory Physiotherapy. Autonomous University of Barcelona
- Ethical Care Consultant of Vella Terra Foundation
- \* Direction of Emergency equipment COVID 19 at Fremap Gent Gran
- Diploma in Physiotherapy at University School of Physiotherapy Gimbernat, Cantabria
- Diploma in Physiotherapy, Autonomous University of Barcelona
- Member of the Ethics Committee L' Onada Serveis



This Hybrid Professional Master's Degree consists of 8 modules with sections extensively developed by an expert teaching team in the field who have contributed their insights to the creation of all study materials. The specialist will be able to delve into aspects such as interdisciplinary work in Geriatrics and the application of the most upto-date methods for addressing older patients with various pathologies. Undoubtedly, a comprehensive curriculum that condenses the necessary updates from the latest scientific evidence.



### tech 34 | Educational Plan

#### **Module 1.** Clinical Reasoning in Physiogeriatrics

- 1.1. Past, Present and Future of Physiotherapy in Geriatrics
  - 1.1.1. Brief History
    - 1.1.1.1. Origin of Discipline Beyond our Borders
    - 1.1.1.2. Origin of the Discipline in Spain
    - 1.1.1.3. Conclusions
  - 1.1.2. Current Status of the Update in Rehabilitation Medicine in Geriatrics
  - 1.1.3. Future of the Update in Rehabilitation Medicine in Geriatrics
    - 1.1.3.1. New Professional Technologies
- 1.2. Active ageing
  - 1.2.1. Introduction
  - 1.2.2. Concept of Active Aging
  - 1.2.3. Classification
  - 1.2.4. Active Aging from the Patients Point of View
  - 1.2.5. Role of the Physical Communication Address in Active Aging Programs
  - 1.2.6. Example of Intervention
- 1.3. Update on Rehabilitation Medicine in Geriatrics and Context of Action
  - 1.3.1. Introduction and Definitions
  - 1.3.2. Fields of Action
    - 1.3.2.1. Residential Centers
    - 1.3.2.2. Socio-Sanitary
    - 1.3.2.3. Primary Care
    - 1.3.2.4. Discipline of Work in Palliative Care Units
  - 1.3.3. Areas of the Future in Geriatric Medicine
    - 1.3.3.1. New Technologies
    - 1.3.3.2. Physiotherapy and Architecture

- 1.3.4. Interdisciplinary Teams in Geriatrics
  - 1.3.4.1. Multidisciplinary or Interdisciplinary Teams?
  - 1.3.4.2. Composition and Functioning of the Interdisciplinary Team
  - 1.3.4.3. Main Functions within the Interdisciplinary Team
- 1.4. Differential Diagnosis. Red and Yellow Flags
  - 1.4.1. Introduction and Definitions
    - 1.4.1.1. Differential Diagnosis
    - 1.4.1.2. Diagnosis in Rehabilitation Medicine
    - 1.4.1.3. Geriatric Syndromes
    - 1.4.1.4. Red and Yellow Flags
  - 1.4.2. Most Common Red Flags in Clinical Practice
    - 1.4.2.1. Urinary Infection
    - 1.4.2.2. Oncologic Pathology
    - 1423 Heart Failure
    - 1.4.2.4. Fractures
- 1.5. Approach to the Session on Update on Rehabilitation Medicine in Geriatrics
  - 1.5.1. Examination and Assessment of the Geriatric Patient
    - 1.5.1.1. Assessment Components
    - 1.5.1.2. Most Commonly Used Scales and Tests
  - 1.5.2. Determination of Treatment Objectives
  - 1.5.3. Organization of the Treatment Session
  - 1.5.4. Organization of the Professional's Own Work
  - 1.5.5. Treatment Follow-up in the Elderly Patient
- 1.6. Pharmacology, Effects on the Neuromusculoskeletal System
  - 1.6.1. Introduction
    - 1.6.1.1. Drugs Influencing Gait
  - 1.6.2. Drugs and Risk of Falls

### Module 2. Person-Centered Care (PCA)

- 2.1. Definition, Concepts and Basic Principles
  - 2.1.1. Decalogue of People-Centered Care
    - 2.1.1.1. What is and What is Not PCA? Its Principles
    - 2.1.1.2. Clarifying Concepts. Glossary of Terms
  - 2.1.2. Origin and Conceptual Basis of PCA
    - 2.1.2.1. References from Psychology
    - 2.1.2.2. Referents from Social Intervention
    - 2.1.2.3. Quality of Life Benchmarks
    - 2.1.2.4. References from the Study of Disability
    - 2.1.2.5. Civil Rights Referents from the Civil Rights of Individuals
    - 2.1.2.6. Referrals from Gerontological Resources
    - 2.1.2.7. Legal and Regulatory Aspects
- 2.2. The PCA Model
  - 2.2.1. Paradigm and Intervention Model
- 2.3. Good Practices in PCA
  - 2.3.1. Definition and Concept of BBPP
  - 2.3.2 Areas of Good Practices
  - 2.3.3. Good Practice, the Path to Good Practice
  - 2.3.4. Key Good Practices
- 2.4. The Process of Transformation from a Service Model to a PCA Model
  - 2.4.1. How to Build an Apprenticeship?
  - 2.4.2 Transformation of Services
  - 2.4.3. Transformation of People
- 2.5. Provision of Services in an PCA Model
  - 2.5.1. Person-Centered Physiotherapy vs. Individualized Physiotherapy
  - 2.5.2. Epistemology of People-Centered Physiotherapy

- 2.6. Actions
  - 2.6.1. Introduction
  - 2.6.2. Actions
    - 2.6.2.1. The Reception of the Professional
    - 2.6.2.2. Assessment and Evaluation Processes
    - 2.6.2.3. The Intervention
    - 2.6.2.4. Interrelationship With Co-Workers
    - 2.6.2.5. Interrelation with the Physical Environment
    - 2.6.2.6. Interrelation with the Community

#### Module 3. Understanding Fragility

- 3.1. Integral Vision of Fragility
  - 3.1.1. Introduction
  - 3.1.2. Definitions of Fragility
  - 3.1.3. Pathophysiological Bases of Frailty
    - 3.1.3.1. Activation of Inflammation and Coagulation Processes
    - 3.1.3.2. Comorbidity
    - 3.1.3.3. Malnutrition and Sarcopenia
  - 3.1.4. Frailty as a Syndrome
  - 3.1.5. Interventions and Models of Care
- 3.2. Tools for Comprehensive Geriatric Assessment of Frailty
  - 3.2.1. Introduction
  - 3.2.2. Comprehensive Geriatric Assessment
  - 3.2.3. Frailty Assessment Scales
  - 3.2.4. Conclusions
  - 3.2.5. Learning Points

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3.3.	Assessment of Fragility in Rehabilitation Medicine		
	3.3.1.	Initial Interview	
	3.3.2.	Highlighted Tests	
		3.3.2.1. Specific Tests for Frailty	
		3.3.2.2. Fall Risk Test	
		3.3.2.3. Dual Tasks	
		3.3.2.4. Strength Test	
		3.3.2.5. Cardiopulmonary Capacity Test	
		3.3.2.6. Functional Tests	
	3.3.3.	Parameter Calculation	
	3.3.4.	Summary	
3.4.	Prescription of Physical Activity in the Frail Person		
	3.4.1.	General Aspects	
	3.4.2.	Individual Exercise Prescription	
		3.4.2.1. Heating	
		3.4.2.2. Strength/Power	
		3.4.2.3. Balance	
		3.4.2.4. Aerobic Endurance	
		3.4.2.5. Stretching	
	3.4.3.	Group Dynamics in the Frail or Pre-fragile Patient	
		3.4.3.1. Heating	
	3.4.4.	Summary	
3.5.	Therapeutic Adherence in the Prescription of Physical Activity		
	3.5.1.	Factors of Non-Adherence	
		3.5.1.1. Socioeconomic Factors	
		3.5.1.2. Health System or Care	
		3.5.1.3. Disease	
		3.5.1.4. Treatment	
		3.5.1.5. Patients	
	3.5.2.	Adherence Strategies	
		3.5.2.1. ICT	
	3.5.3.	Summary	

3.6.	Fall Assessment		
	3.6.1.	Risk factors for falls	
	3.6.2.	Diagnosis of Falls	
		3.6.2.1. Specific Fall Risk Diagnostic Tests	
	3.6.3.	Consequences of Falls	
	3.6.4.	Containment to Prevent Falls	
		3.6.4.1. Side Effects of Containment	
		3.6.4.2. Adapted Containment	
		3.6.4.3. Environmental and Verbal Restraints	
		3.6.4.4. Types of Containments	
	3.6.5.	Post-Fall Treatment	
	3.6.6.	Summary	
3.7.	Transitions		
	3.7.1.	Justification of Programs in Transitions	
	3.7.2.	Limitations in Care Transitions	
	3.7.3.	What Are We Talking About When We Talk About Care Transitions?	
	3.7.4.	An Example of Pre-Discharge Service: transition coaches	
	3.7.5.	Nursing Frailty Assessment at Discharge	
		3.7.5.1. Communication Techniques	
		3.7.5.2. Motivational Interview	
		3.7.5.3. Person-Centered Care; Health Goals for the Elderly	
3.8.	Princip	Principles of People-Centered Care	
3.9.	Patient Empowerment at Discharge		
	3.9.1.	Adherence to Pharmacological Treatment	
	3.9.2.	Teach Back Method Tool	
		3.9.2.1. Incorporation of Active Lifestyles in Older Adults	
		3.9.2.2. Elderly Nutritional Habits	
		3.9.2.3. Promoting Person-Centered Self-Care	
	3.9.3.	Coordination Between Levels of Care for Continuity of Care with the Communit	
	3.9.4.	Monitoring After Discharge from Intermediate Care Hospitals	

# **Module 4.** Professional Approach to the Person Affected by Cognitive Impairment

- 4.1. Introduction to Cognitive Impairment
  - 4.1.1. Cognitive Impairment
    - 4.1.1.1. Definition and Epidemiology
    - 4.1.1.2. Risk Factors
    - 4.1.1.3. Diagnosis
    - 4114 Treatment
      - 4.1.1.4.1. Non-Pharmacological Treatment
      - 4.1.1.4.2. Pharmacological Treatment
      - 4.1.2. Dementia
    - 4.1.2.1. Epidemiology
    - 4.1.2.2. Pathogenesis and Risk Factors
    - 4.1.2.3. Clinical Manifestations
    - 4.1.2.4. Evolution
    - 4.1.2.5. Diagnosis
    - 4.1.2.6. Differential Diagnosis
      - 4.1.2.6.1. Mild Cognitive Impairment: Already Explained Previously
      - 4.1.2.6.2. Acute Confusional Syndrome or Delirium
      - 4.1.2.6.3. Subjective Memory Complaints and AMAE (Age-Related Memory Impairment)
      - 4.1.2.6.4. Affective Disorders-Depression-Depressive Pseudodepressive Dementia
    - 4.1.2.7. Severity of Dementia
    - 4.1.2.8. Treatment
      - 4.1.2.8.1. Non-Pharmacological Treatment
      - 4.1.2.8.2. Pharmacological Treatment
      - 4.1.2.9. Comorbidity-Mortality

- 4.2. Types of Cognitive Impairment: Possible Classifications
  - 4.2.1. Utility of the Cognitive Impairment Classification
  - 4.2.2. Types of Classification
    - 4.2.2.1. By Degree of Affectation
    - 4.2.2.2. By Evolution Course
    - 4.2.2.3. By Age of Presentation
    - 4.2.2.4. By Clinical Syndrome
    - 4.2.2.5. By Etiology
- 4.3. Causes and Effects of Cognitive Impairment
  - 4.3.1. Introduction
  - 4.3.2. Risk Factors for Cognitive Impairment
  - 4.3.3. Causes of Cognitive Impairment
    - 4.3.3.1. Primary Neurodegenerative Etiology
    - 4.3.3.2. Vascular Etiology
    - 4.3.3.3. Other Etiologies
  - 4.3.4. Effects of Cognitive Impairment
    - 4.3.4.1. Inattention and Lack of Concentration
    - 4.3.4.2. Memory Impairment
    - 4.3.4.3. Language Impairment
    - 4.3.4.4. Apraxia
    - 4.3.4.5. Agnosias
    - 4.3.4.6. Executive Function Disorders
    - 4.3.4.7. Alteration of Visuospatial Functions
    - 4.3.4.8. Behavioral Alteration
    - 4.3.4.9. Alteration of Perception
  - 4.3.5. Conclusions

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4.4.	Individ	ual and Group Rehabilitation Medicine Approach		4.6.5.	Basic Needs
	4.4.1.				4.6.5.1. Requirements of Basal Stimulation
	4.4.2.	Professional Assessments			4.6.5.2. Basic Areas of Perception
	4.4.3.	Therapeutic Objectives		4.6.6.	Body Identity and Environment
	4.4.4.	Therapeutic Interventions from Physiotherapy		4.6.7.	
		4.4.4.1. Physical exercise			4.6.7.1. Communication
		4.4.4.2. Individual Therapy			4.7. Sharing of Knowledge, Interdisciplinary Approach to the Affected Person
		4.4.4.3. Group Therapy		4.7.1.	Introduction
		4.4.4.4. Rehabilitation Medicine According to the Stages of Cognitive Impairment		4.7.2.	Biopsychosocial Model as a Reference
		4.4.4.5. Alteration of Balance and Gait		4.7.3.	Multidisciplinarity and Interdisciplinarity
	4.4.5.	Adherence to Treatment-Family		4.7.4.	Areas of Intervention. Levels of Care
4.5.	Tools t	to Connect			4.7.4.1. Primary Care
	4.5.1.	Introduction			4.7.4.2. Specialized Care
	4.5.2.	Difficulties Encountered with Disoriented and/or Disconnected Users			4.7.4.3. Socio-Health Care ASS
	4.5.3.	How to Access the Disoriented and/or Disconnected User			4.7.4.4. Other Professionals
		4.5.3.1. Music as a Tool for Working with People with Dementia			4.7.4.5. Integrative Health. A Holistic View
		4.5.3.1.1. Application of Music in People Affected by Dementia		4.7.5.	Community Intervention
		4.5.3.2. Animal Assisted Therapy (AAT)		4.7.6.	Conclusions
		4.5.3.2.1. Application of TAA in People Affected by Dementia	Mad	lula E	Dain and Asing Undata an Ourrant Caiantifia
		4.5.3.2.2. Structure of Sessions	IVIOC		Pain and Aging, Update on Current Scientific
		4.5.3.2.3. Materials	5.1.	Anator	ny and Physiology of Pain Transmission
		4.5.3.2.4. The Dog		5.1.1.	Peripheral Elements
		4.5.3.2.5. Examples of AAR Application		5.1.2.	Nociceptors
		4.5.3.3. Yoga and Mindfulness		5.1.3.	Nociceptor Depolarization
		4.5.3.3.1. Yoga		5.1.4.	Peripheral Sensitization of Nociceptors
		4.5.3.3.2. Mindfulness	5.2.	Dorsal	Ganglion
		4.5.3.3.3. Application of <i>Mindfulness</i>		5.2.1.	Spinal Cord
4.6.	Basal S	Stimulation		5.2.2.	Posterior Horn
	4.6.1.	Origin of Basal Stimulation	5.3.	Ascend	ding Pain Pathways
	4.6.2.	Definition of Basal Stimulation		5.3.1.	
	4.6.3.	Indications of Basal Stimulation		5.3.2.	Concept of the Pain Matrix
	4.6.4.	Basic principals of Basal Stimulation		5.3.3.	Brain Areas Related to Pain
		4.6.4.1. Advantages of Basal Stimulation		5.3.4.	Descending Pain Pathways
				5.3.5.	Descending Inhibition

5.3.6. Descending Facilitation

5.4.	Types of Pain			Pain Sy	ndromes in Geriatrics
	5.4.1.	Introduction		5.6.1.	Introduction
	5.4.2.	Temporal		5.6.2.	Cervical Osteoarthriti
		5.4.2.1. Acute Pain		5.6.3.	Occipital Neuralgia
		5.4.2.2. Chronic Pain		5.6.4.	Cervicogenic Dizzine
	5.4.3.	Pathophysiology		5.6.5.	Vertebral Fracture du
		5.4.3.1. Nociceptive Pain		5.6.6.	Lumbar Osteoarthriti
		5.4.3.2. Somatic		5.6.7.	Central Canal Stenos
		5.4.3.3. Visceral		5.6.8.	Hip Osteoarthritis
		5.4.3.4. Neuropathic Pain		5.6.9.	Shoulder Rotator Cuf
		5.4.3.5. Nociceptive vs. Neuropathic Pain		5.6.10.	Knee Osteoarthritis
	5.4.4.	Central Sensitization	5.7.	Pain As	sessment
		5.4.4.1. Wind-up Responses Mediated by C-Fibers		5.7.1.	Introduction
		5.4.4.2. Long-Term Empowerment		5.7.2.	Communicative Fram
		5.4.4.3. Changes in the Phenotype of Posterior Horn Neurons and Apoptosis of			5.7.2.1. Beginning of
		GABAergic Neurons and Aberrant Connections			5.7.2.2. Interview - Ide
		5.4.4.4. Excitatory Changes in the Cerebral Cortex			5.7.2.3. Closing of the
5.5.	Pain and Aging			5.7.3.	Main Problems in Co
	5.5.1.	Aging			5.7.3.1. Medical Histo
	5.5.2.	Characteristics of Aging			5.7.3.2. Clinical Featu
	5.5.3.	Prevalence			5.7.3.3. Location and
	5.5.4.	Physiological Changes of Aging			5.7.3.4. Chronology a
	5.5.5.	Physical and Neurological Changes with Impact on Pain Chronification		5.7.4.	Current and Previous
		5.5.5.1. Differences in Pain Perception		5.7.5.	Pain in Patients with
		5.5.5.2. Increased Chronic Inflammation in Aging		5.7.6.	Scales for Assessing
		5.5.5.3. Disruption of the Circadian Cycle in Aging			5.7.6.1. One-dimension
		5.5.5.4. Neurodegeneration and Implications for Learning			5.7.6.2. Multidimensi
		5.5.5.5. Elderly Depression		5.7.7.	Musculoskeletal Exar
		5.5.5.6. Sedentary Lifestyle and Frailty in the Elderly		5.7.8.	Observation and Visu
		5.5.5.7. Under-Recognized and Under-Treated Pain		5.7.9.	Examination of the P
				5.7.10.	Movement and Musc

5.6.2.	Cervical Osteoarthritis
5.6.3.	Occipital Neuralgia
5.6.4.	Cervicogenic Dizziness
5.6.5.	Vertebral Fracture due to Osteoporosis
5.6.6.	Lumbar Osteoarthritis and Facet Syndrome
5.6.7.	Central Canal Stenosis in the Lumbar Spine
5.6.8.	Hip Osteoarthritis
5.6.9.	Shoulder Rotator Cuff Rupture
5.6.10.	Knee Osteoarthritis
Pain As	sessment
5.7.1.	Introduction
5.7.2.	Communicative Framework - Communicative Skills During the Interview
	5.7.2.1. Beginning of the Session - Welcome
	5.7.2.2. Interview - Identify Reasons for Consultation
	5.7.2.3. Closing of the Session - Dismissal
5.7.3.	Main Problems in Communicating with the Elderly Patient
	5.7.3.1. Medical History
	5.7.3.2. Clinical Features of Pain
	5.7.3.3. Location and Quality
	5.7.3.4. Chronology and Behavior
5.7.4.	Current and Previous Treatment
5.7.5.	Pain in Patients with Cognitive Impairment
5.7.6.	Scales for Assessing Pain
	5.7.6.1. One-dimensional Scales
	5.7.6.2. Multidimensional Scales
5.7.7.	Musculoskeletal Examination
5.7.8.	Observation and Visual Inspection
5.7.9.	Examination of the Pain Area
5.7.10.	Movement and Muscle Assessment
5.7.11.	Joint Assessment
5.7.12.	Muscular Strength Assessment

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5.8. Ph	armacological Treatment of Pain in the Geriatric Patient	Module 6. Updating in support devices for the autonomy of people	
5.5 5.5 5.5	3.1. Drugs for Pain 3.2. Aines 3.3. Coxibs 3.4. Paracetamol 3.5. Metamizole	<ul> <li>6.1. Support Product Definition</li> <li>6.1.1. Framework and Definition of Supporting Product</li> <li>6.1.1.1. ISO 9999</li> <li>6.1.1.2. EASTIN</li> <li>6.1.2. What Characteristics Must Each Support Product Comply With? (S.P)</li> </ul>	
5.5 5.5	3.6. Opioid Drugs 3.7. Phytotherapy 3.8. Adjuvant Drugs in Treatment	6.1.3. Success in Optimal Product Support Advice 6.2. Updating of the Different Assistive Devices for the Activities of Daily Living 6.2.1. Facilitating Devices for Feeding 6.2.2. Dressing Aids	
5. <sup>1</sup>	<ul> <li>1.1. Introduction</li> <li>2.2. Biopsychosocial Approach to Pain</li> <li>2.3. Response Problems and Passive Manual Therapy as the Only Treatment</li> <li>2.4. Integration of the Mechanisms of Pain, Function, Impairment and Psychosocial Factors</li> <li>5.9.4.1. Integration of Pain Mechanisms</li> <li>5.9.4.2. Integration of Function and Impairment</li> </ul>	<ul> <li>6.2.3. Facilitating Devices for Hygiene and Personal Care</li> <li>6.3. Update on Different Pressure-Dissipating Devices for Pressure Ulcer Prevention</li> <li>6.3.1. Sitting</li> <li>6.3.2. Supine position</li> <li>6.3.3. Pressure Blanket Evaluation System</li> <li>6.4. Updating of the Various Devices to Facilitate Transfers and Mobilizations</li> </ul>	
	5.9.4.3. Integration of Psychosocial Factors  9.5. Mature Organism Model  9.6. Integrated or Multimodal Treatment Strategies  5.9.6.1. Educational	<ul> <li>6.4.1. Transfers and Mobilizations</li> <li>6.4.1.1. Common Errors</li> <li>6.4.1.2. Basic Guidelines for the Correct Use of the Different Devices</li> <li>6.4.2. Device Upgrades</li> </ul>	
5.	5.9.6.2. Guide to Explain Pain 5.9.6.3. Manual Therapy 5.9.6.4. Mechanical Stimulation 9.7. Peripheral Mechanism 9.8. Spinal Mechanisms 9.9. Supraspinal Mechanisms	<ul> <li>6.5. Novelties in the Different Devices Designed to Facilitate Mobility and Correct Position</li> <li>6.5.1. General Framework</li> <li>6.5.2. Mobility Devices in Geriatrics</li> <li>6.5.2.1. Tilting Chair</li> <li>6.5.2.2. Scooter</li> <li>6.5.2.3. Electronic Driving Wheelchair</li> </ul>	oning
5.	5.9.10.1. Resistance Exercise 5.9.10.2. Aerobic Exercise 5.9.10.3. Multimodal Exercise 5.9.10.4. Aquatic Exercise	<ul> <li>6.5.2.4. Relocation Assistance</li> <li>6.5.2.5. Rear Walker</li> <li>6.5.3. Positioning Devices in Geriatrics</li> <li>6.5.3.1. Backups</li> <li>6.5.3.2. Headrest</li> </ul>	

- 6.6. Personalized Devices for the Control of Wanderers, plesoassistance
  - 6.6.1. Definition of Plesioassistance or Control of Wanderers
  - 6.6.2. Differences between Plesioassistance and Telecare
  - 6.6.3. Objectives of Plesioassistance or Control of Wanderers
  - 6.6.4. Components of the Plesioassistance Devices
  - 6.6.5. Simple Wanderer Control Devices for Home Environments
  - 6.6.6. Adaptation of the Environment to Facilitate the Wanderer's Orientation
  - 6.6.7. Summary
- 6.7. Support Products for Recreation, Taking Advantage of Current Technologies
  - 6.7.1. Importance of S.P. Standardization
  - 6.7.2. Furniture Support Products
    - 6.7.2.1. Sanitary Furniture
    - 6.7.2.2. Living Room Furniture
    - 6.7.2.3. Bedroom Furniture
    - 6.7.2.4. Environment Control
- 6.8. Accessibility and Architectural Barrier Removal Support Products Update
  - 6.8.1. Framework for the Abolition of Architectural Barriers and Universal Access to Housing
  - 6.8.2. Support Products for the Removal of Architectural Barriers in the Living Environment
    - 6.8.2.1. Ramps
    - 6.8.2.2. Lift Chairs
    - 6.8.2.3 Inclined Flevated Platform
    - 6.8.2.4. Overhead Crane
    - 6.8.2.5. Short Travel Ladder Platform
    - 6.8.2.6. Lifting Platform
    - 6.8.2.7. Stair Climbing Devices
    - 6.8.2.8 Convertible Ladder
  - 6.8.3. Support Products for the Removal of Architectural Barriers in the Vehicle Environment
    - 6.8.3.1. Vehicle-Specific Adaptations
    - 6.8.3.2. Carony
    - 6.8.3.3. Turny-Turnout

- 6.9. New Technology for the Creation of Low-Cost Support Products
  - 6.9.1. 3D Printing
    - 6.9.1.1. What is 3D Printing Technology?
    - 6.9.1.2. 3D Applications
  - 6.9.2. Recreational Support Products
    - 6.9.2.1. Use of Commercial Technology Applied in Geriatrics
    - 6.9.2.2. Use of Specialized Technology Applied in Geriatrics
    - 6.9.2.3. Public Geriatric Parks

# **Module 7.** Physiotherapy in traumatology, neurology, pelvic floor and respiratory disorders in the elderly. Searching for Evidence

- 7.1. Physiotherapy in Fractures and Dislocations in the Elderly
  - 7.1.1. Fractures in the Elderly
    - 7.1.1.1. General Concepts of Fractures
    - 7.1.1.2. Main Fractures in the Elderly and their Treatment
    - 7.1.1.3. Most Frequent-Surgical Complications
  - 7.1.2. Dislocation in the Elderly
    - 7.1.2.1. Introduction and Immediate Handling
    - 7.1.2.2. Main Dislocation in the Elderly and their Treatment
    - 7.1.2.3. Most Frequent-Surgical Complications
- 7.2. Hip, Knee and Shoulder Arthroplasty
  - 7.2.1. Arthrosis
  - 7.2.2. Rheumatoid Arthritis
  - 7.2.3. Rehabilitation Medicine in Hip Arthroplasty
  - 7.2.4. Rehabilitation Medicine in the Preoperative Phase
  - 7.2.5. Rehabilitation Medicine in the Postoperative Phase
  - 7.2.6. Rehabilitation Medicine in Knee Arthroplasty
  - 7.2.7. Rehabilitation Medicine in the Preoperative Phase
  - 7.2.8. Fast-track in Hip and Knee Arthroplasty
  - 7.2.9. Rehabilitation Medicine in Shoulder Arthroplasty
  - 7.2.10. Anatomic Total Shoulder Arthroplasty

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7.3.	Rehab	ilitation Medicine in the Amputee Patient				
	7.3.1.	Multidisciplinary Team in the Amputee Patient				
	7.3.2.					
	7.3.3.	Evaluation of the Amputee Patient				
	7.3.4.	The Doctor in the Prosthetic Rehabilitation Program				
		7.3.4.1. Perioperative Phase				
		7.3.4.2. Pre-Prosthetic Phase				
	7.3.5.	Patient Education				
	7.3.6.	Long-Term Address of the Amputee Patient				
7.4.	Approa	Approach to Acute, Subacute and Chronic Stroke Patients				
	7.4.1.	Definition, Classification, Early Detection and Initial Hospital Address				
	7.4.2.	Guiding Principles in Neurophysiotherapy				
	7.4.3.	Outcome Measurement Scales after Stroke				
	7.4.4.	Assessment and Treatment According to the Evolutionary Stage of the Disease				
		7.4.4.1. Acute Phase				
		7.4.4.2. Subacute Phase				
		7.4.4.3. Chronic Phase				
	7.4.5.	Address of Frequent Complications				
		7.4.5.1. Spasticity				
		7.4.5.2. Contractures				
		7.4.5.3. Shoulder Pain and Subluxation				
		7.4.5.4. Falls				
		7.4.5.5. Fatigue				
		7.4.5.6. Other Fundamental Problems: Cognitive, Visual, Communicative, Swallowing, Continence, etc				
		7.4.6. Beyond Rehabilitation discharge				
7.5.	New T	rends for Parkinson's Disease Patients				
	7.5.1.	Definition, Epidemiology, Pathophysiology and Diagnosis of PD				
	7.5.2.	Global Address of the Person with PD				
	7.5.3.	History of Physical Therapy and Physical Examination				
	7.5.4.	Goal Setting in People with PD				
	7.5.5.	Physiotherapy Treatment in PD				
	7.5.6.	Falls in PD, Towards a New Approach Model?				
	757	Self-Address and Information for Caregivers				

- 7.6. Urinary Incontinence and Chronic Urinary Retention7.6.1. Definition of Urinary Incontinence
  - 7.6.2. Types of Urinary Incontinence7.6.2.1. Clinical Classification7.6.2.2. Urodynamic Classification
  - 7.6.3. Therapeutics of Urinary Incontinence and Overactive Bladder
  - 7.6.4. Urinary Retention
  - 7.6.5. Rehabilitation Medicine in Urinary Incontinence and Chronic Urinary Retention
- 7.7. Respiratory Medicine in COPD
  - 7.7.1. Definition, Etiology, Pathophysiology and Consequences
  - 7.7.2. Diagnosis and Classification
  - 7.7.3. Caring for a Patient with CPOD
    - 7.7.3.1. Treatment in Stable Phase
    - 7.7.3.2. Treatment in Exacerbations
- 7.8. Neurological Conditions
  - 7.8.1. Introduction
  - 7.8.2. Nervous Disorders Associated with Respiratory Problems
  - 7.8.3. Rehabilitation Medicine for Respiratory Problems of Nervous Disorders
  - 7.8.4. Respiratory Warning Signs

# Module 8. Tools for Daily Practice in Geriatrics

- 8.1. Communication, a Tool for the Success of the Treatment
  - 8.1.1. Introduction
    - 8.1.1.1. The Mirror and the Lamp
  - 8.1.2. Communication in the Framework of the Therapeutic Relationship
    - 8.1.2.1. Definitions
    - 8.1.2.2. Basic Aspects
      - 8.1.2.2.1. Components
      - 8.1.2.2.2. Context
      - 8.1.2.2.3. Impossibility of Not Communicating
  - 8.1.3. Codes in Messages
    - 8.1.3.1. Specific Aspects of Communication with Elderly Patients
    - 8.1.3.2. Main Problems in Communicating with the Elderly
    - 8.1.3.3. Communication with the family
    - 8.1.3.4. The Therapeutic Relationship as a Special Form of Social Interaction
    - 8.1.3.5. Model for Communication Training
- 8.2. Grief in the Professional
  - 8.2.1. Why Talk About Grief?
  - 8.2.2. What is Grief?
  - 8.2.3. Is Grief a Depression?
  - 8.2.4. How Does It Show Itself in Grief?
  - 8.2.5. How is a Grief Process Elaborated?
  - 8.2.6 How Will We React to the Loss of a Patient?
  - 8.2.7. When Does the Grief End?
  - 8.2.8. What Is a Complicated Grief?
  - 8.2.9. When You're the Griever: First Tools
  - 8.2.10. When Someone Else is the Griever: How to Accompany?
  - 8.2.11. When to Ask For Help or Refer to a Psychologist?

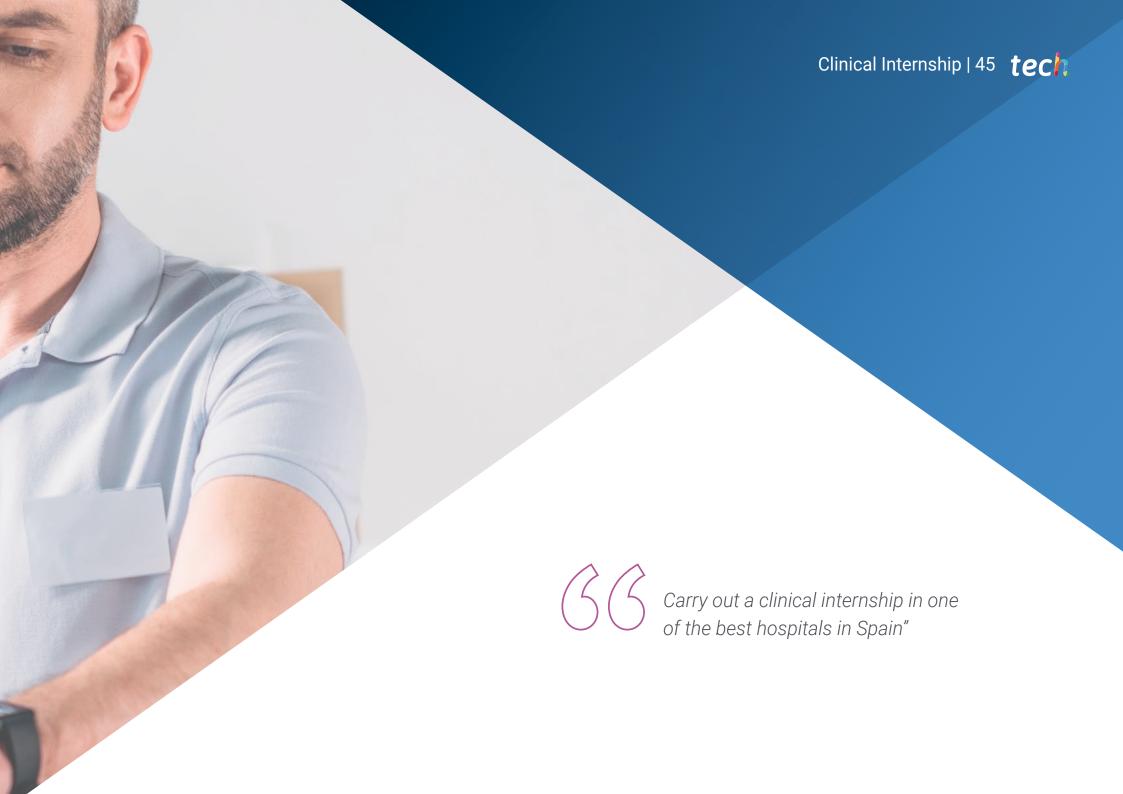
## 8.3. Elderly-Centered ICT

- 8.3.1 ICT and Health
  - 8.3.1.1. Specific Terminology
    - 8.3.1.1.1. Information and Communication Technologies (ICT)
    - 8.3.1.1.2. (eHealth)
    - 8.3.1.1.3. (mHealth)
    - 8.3.1.1.4. Telemedicine
    - 8.3.1.1.5. Wearables
    - 8.3.1.1.6. Gamification
    - 8.3.1.1.7. (e-Doctor)
    - 8.3.1.1.8. (e-Patient)
    - 8.3.1.1.9. Digital Health
    - 8.3.1.1.10. Digital Divide
    - 8.3.1.1.11. Infoxication
- 8.3.2. 'e-Physiotherapy' in Geriatrics
  - 8.3.2.1. The Generational Digital Divide
  - 8.3.2.2. Prescription of ICT in the Update on Rehabilitation Medicine in Geriatrics



Delve into the most relevant theory in this field, subsequently applying it in a real work environment"





# tech 46 | Clinical Internship

This Internship Program consists of a 3-week period from Monday to Friday, with 8 consecutive hours of Practical Training with an attending specialist. This stay will allow you to see real patients with a team of leading professionals in the field of Rehabilitation Medicine in Geriatrics, applying the most innovative diagnostic procedures for each case.

In this completely practical Internship Program, the activities are aimed at developing and perfecting the skills necessary to provide healthcare in areas and conditions that require highly qualified professionals, and are oriented towards specific expertise for practicing the activity, in a safe environment for the patient and Cone with highly professional performance.

It is undoubtedly, an opportunity to learn by working in the innovative hospital of the future, where real-time health monitoring of patients is at the center of the digital culture of its professionals. This is a new way of understanding and integrating health processes, being the ideal teaching scenario for this innovative experience in the improvement of professional Healthcare competencies of the 21st century.

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 clinical medicine practice (learning to be and learning to relate).

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:



Through this program, you can carry out your internships at a hospital of the future, with the best healthcare technology and alongside renowned professors. Incorporate the latest advances of Rehabilitative Medicine in Geriatrics into your regular practice"



# Clinical Internship | 47 **tech**

Module	Practical Activity
	Diagnose Urinary Incontinence through Ultrasounds and other imaging tests such as Magnetic Resonance
Resources for diagnosis in Geriatric	Indicate Synovial Fluid Analysis to assess the condition of patients with signs of Arthritis
Rehabilitative Medicine	Use Positron Emission Tomography to determine the extent of Parkinson's Disease in geriatric patients
	Apply the Barthel Index, its modified version, and the Functional Independence Measure to assess geriatric patients
	Apply Cryotherapy for Osteoarthritis and post-surgical Low Back Pain
	Prescribe Orthotic devices to modify the structure or function of the neurological and musculoskeletal system
Therapeutic techniques for	Use Hydrotherapy to regain muscle strength
Rehabilitative Medicine in Geriatrics	Employ Thermotherapy or thermal therapy for arthritis pain, lower back pain, cervical pain, and adhesive capsulitis of the shoulder
	Utilizing Functional Electrical Stimulation for spinal cord injuries and hemiplegia
	Implement pharmacotherapy according to their different effects on the Neuromusculoskeletal System
Approach from the physiotherapy of the	Acknowledge the causes and effects of cognitive impairment
person affected by Cognitive Impairment,	Apply basic cerebrovascular system stimulation
Chronic Pain, and	Prescribe the pharmacological treatment of pain in the geriatric patient
other conditions of elderly	Perform the Respiratory Physiotherapy in COPD
	Use support products and architectural barrier removal products
Support devices to enhance the	Indicate Different Pressure-Dissipating Devices for Pressure Ulcer Prevention
autonomy of geriatric	Use different devices to facilitate transfers and mobilizations of patients with wandering control and personal assistance needs
patiento	Use prostheses for physical support of patients and assisting with their adaptation

# **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 practical training 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 program agreement shall be 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 52 | Where Can I Do the Clinical Internship?



## **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 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 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 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 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 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 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



# Where Can I Do the Clinical Internship? | 53 tech



## Policlínico HM Las Tablas

Country City
Spain Madrid

Address: C. de la Sierra de Atapuerca, 5, 28050. Madrid

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

#### Related internship programs:

- Nursing in the Traumatology Department - Diagnosis in Physiotherapy



## Policlínico HM Moraleja

Country City
Spain Madrid

Address: P.º de Alcobendas, 10, 28109, Alcobendas, Madrid

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

#### Related internship programs:

- Rehabilitation Medicine in Acquired Brain Injury Address



# 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



## Policlínico HM Imi Toledo

Country City
Spain Toledo

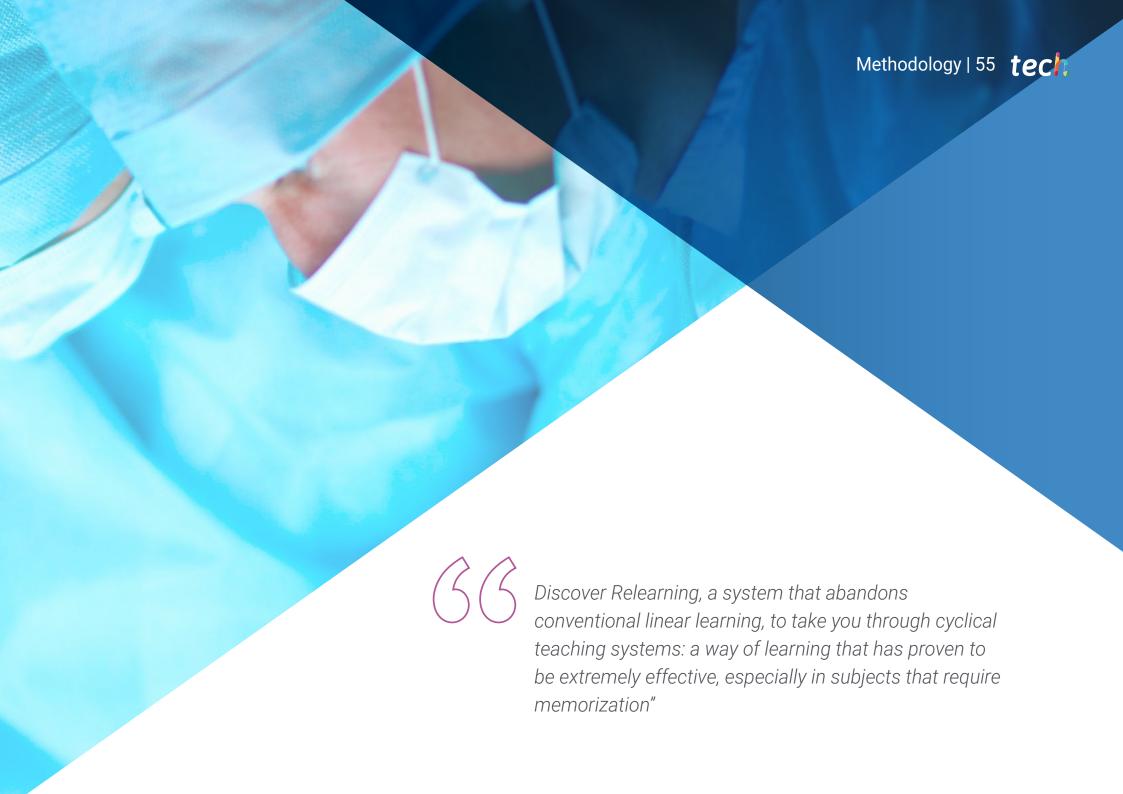
Address: Av. de Irlanda, 21, 45005, Toledo

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

#### Related internship programs:

- Electrotherapy in Rehabilitation Medicine - Hair Transplantation





# tech 56 | 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 | 59 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.

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**

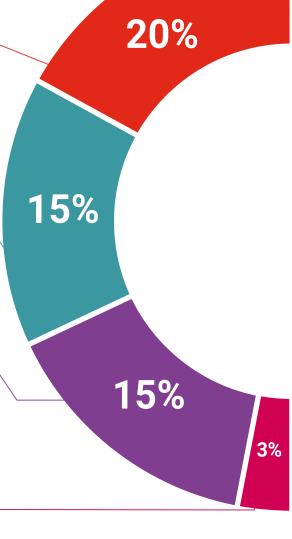
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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

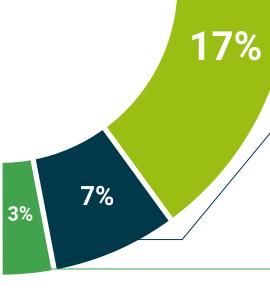
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



### **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.











This **Hybrid Professional Master's Degree in Rehabilitation Medicine in Geriatrics** contains the most complete and up-to-date program on the professional and educational field

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree diploma issued by TECH Technological University via tracked delivery\*

In addition to the certificate, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information

Awards the following

CERTIFICATE

to

Mr./Ms. \_\_\_\_ with identification number \_\_\_\_
For having successfully passed and accredited the following program

HYBRID PROFESSIONAL MASTER'S DEGREE

in

Rehabilitation Medicine in Geriatrics

This is a qualification awarded by this University, with a duration of 1,620 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

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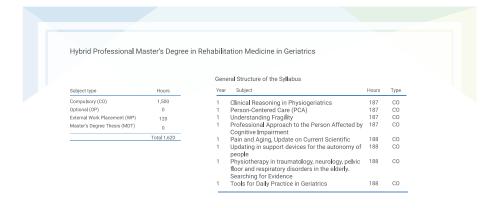
Title: Hybrid Professional Master's Degree in Rehabilitation Medicine in Geriatrics

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1.620 h.





<sup>\*</sup>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 confidence people
health information tutors
education information teaching
guarantee accreditation teaching
institutions technology learning



# Hybrid Professional Master's Degree

Rehabilitation Medicine In Geriatrics

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1.620 h.

