Postgraduate Certificate

Research in Health Sciences

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Postgraduate Certificate

Research in Health Sciences

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

Website: **www.techtitute.com/us/physiotherapy/postgraduate-certificate/research-health-sciences**

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01

Introduction

Evidence in Health Sciences is the basis of any research. Thanks to the exhaustiveness and thoroughness with which the different scientific methods have been developed, it has been possible to achieve highly effective and beneficial results for fields such as Medicine or Physiotherapy. However, working on it requires a series of specific knowledge, not only in order to optimize the procedure and increase the guarantee of the information obtained, but also to do it according to the current legislation and the ethics of the profession. For this reason, and in order to facilitate the graduate's update in this area, TECH and its team of experts have developed a dynamic and intensive program through which they will be able to know in detail the advances in this field. To this end, they will have 150 hours of diverse material, presented in a convenient 100% online format, so that they can update their knowledge in the field of Health Sciences Research in a way that is totally compatible with the activity of their clinic.

If you are looking for a program that will bring you up to date on the latest developments related to the Scientific Method in Health Sciences, this program is ideal for you, and it's 100% online!"

The search for new knowledge, more effective strategies and relevant and reliable information that helps to better understand the conditions and pathologies that a person may suffer from is the main objective of research in Health Sciences. This is an area in constant change due to the thousands of studies that are carried out every year, thanks to which it has been possible to make progress in the development of treatments and techniques that are increasingly more effective and beneficial for the health of patients.

However, the attainment of evidence and its adaptability to the demanding requirements of the Scientific Method in order to be accepted by the relevant community requires a series of characteristics that the professional must demonstrate before publishing the results of their research. And in order to bring you up to date on the different types of studies that currently exist and their technical conditions, TECH and its team of biomedical experts have developed this comprehensive program.

This is a 100% online educational experience through which graduates will be able to delve into the latest evidence related to research methodology and the evident principles for its correct development.

They will also delve into the current regulations and the ethical nature of the information they publish. In addition, special emphasis will be placed on the most effective strategies for the financing of projects, as well as on the communication techniques that have had the best results so far when it comes to making the scientific idea public.

For this purpose, you will have 150 hours of diverse content, both theoretical, practical and additional, the latter presented in different formats: research articles, complementary readings, self-knowledge exercises, detailed videos and dynamic summaries. In this way, they will be able to delve in a personalized way into the aspects of the syllabus that they consider most relevant for their professional development and up-to-date practice.

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

- The development of case studies presented by experts in Health Sciences Research
- 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
- 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

A program that specifically delves into the different types of research and their technical requirements, so that you can get up to date on their characteristics and effective strategies for development"

Among the highlights of this Postgraduate Certificate is the section dedicated to the ethics and legislation of scientific research, thanks to which you will be able to delve dynamically into its intricacies"

Without schedules or on-site classes, you will be able to update your knowledge in Health Sciences Research in a way that is totally adapted to your spatial and temporal needs.

The ideal program to work on the most effective and innovative scientific resources for bibliographic search: Embase, WOS and JCR, Scopus and many more!.

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational 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 education programmed to learn 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 This will be done with the help of an innovative system of interactive videos made by renowned experts.

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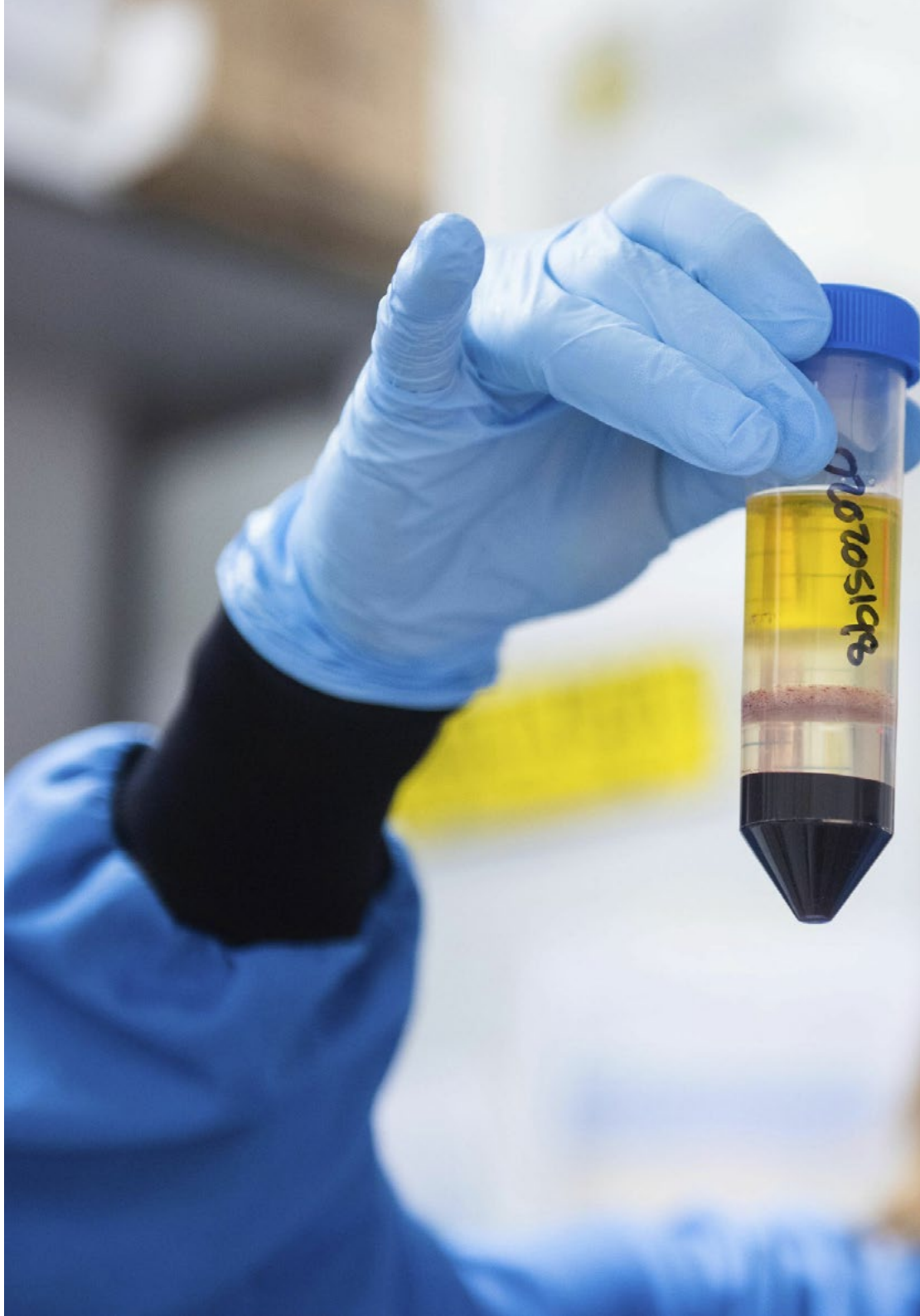
Objectives

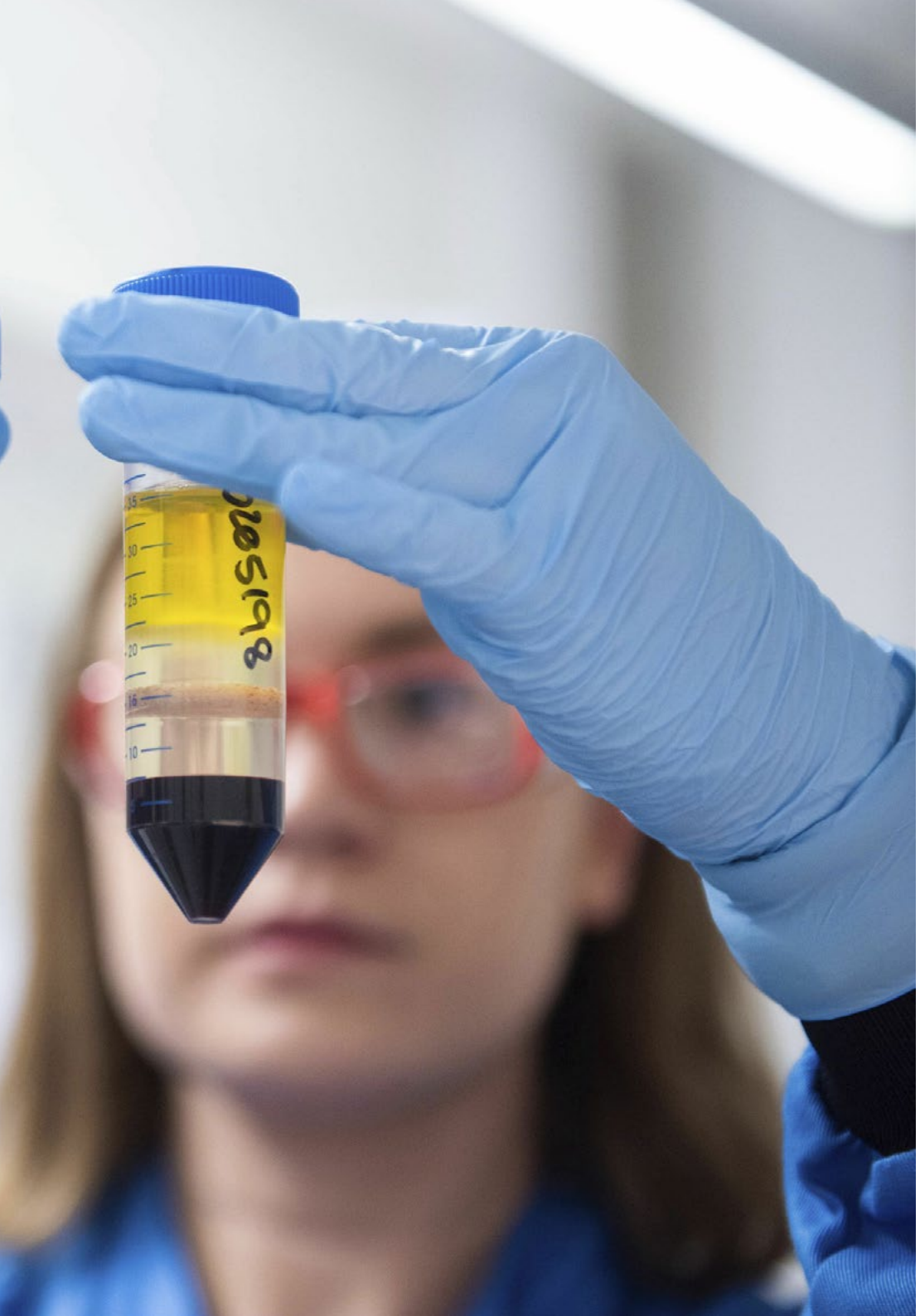
TECH is aware that Physiotherapy professionals, as well as other specialties related to Health Sciences, have very little time to keep up to date with the latest developments in their profession due to the busy schedule imposed by their practice. For this reason, the objective of this Postgraduate Certificate is to provide graduates with the most convenient and effective teaching tools that will allow them to update their knowledge and improve their skills in the field of research in a way that is fully adapted to the needs of their profession.

Do you want to know in detail the latest funding strategies for scientific research? TECH will give you the keys to meet even the most demanding requirements of public and private funding"

General Objectives

- Develop key concepts of medicine that serve as a vehicle to understand clinical medicine
- Determine how to obtain metrics and tools for healthcare management
- Understand the basics of basic and translational scientific methodology
- Examine the ethical and best practice principles governing the different types of research in health sciences
- Identify and generate the means of funding, assessing and disseminating scientific research
- Identify the real clinical applications of the various techniques
- Develop the key concepts of computational science and theory
- Provide the necessary resources to practically apply all the concepts in the modules
- Develop the fundamental concepts of databases
- Determine the importance of medical databases
- Delve into the most important techniques in research
- Determine the different types and applications of telemedicine
- Collect e-Health success stories and mistakes to avoid





Specific Objectives

- Determine the need for scientific research
- Interpret scientific methodology
- Specify the need for types of research in health sciences, each in their context
- Establish the principles of evidence-based medicine
- Examine the needs to interpret scientific results
- Develop and interpret the basics of clinical trials
- Examine the methodology used to disseminate scientific research results and the ethical and legislative principles that govern it

A program that adapts to you, your needs and your requirements and with which you are guaranteed to perfect your research skills in only 150 hours"

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Course Management

Both the direction and the teaching of this Postgraduate Certificate will be carried out, as it can not be otherwise, by a group of professionals versed in the area of Biomedicine and with extensive experience in the research sector. They are also a team that is highly committed to scientific progress, which is why they will provide the graduate with all the material and information they need to keep up to date in this field. In addition, they will be available to answer any questions that may arise during the course of the educational experience.

A team of Biomedicine professionals will guide you through the educational experience, providing you with everything you need to know to get up to date in the processes of Research in Health Sciences"

Management

Ms. Sirera Pérez, Ángela

- Biomedical Engineer expert in Nuclear Medicine and exoskeleton design
- Designer of specific parts for 3D printing at Technadi
- Technician in the Nuclear Medicine area of the University Clinic of Navarra
- Degree in Biomedical Engineering from the University of Navarra
- MBA and Leadership in Healthcare and Medical Technology Companies

Professors

Dr. Ortega Núñez, Miguel Ángel

- Researcher in the area of Biomedicine
- Assistant Professor, Department of Medicine and Medical Specialties, University of Alcalá, Spain
- Doctorate in Health Sciences, University of Alcala
- Graduate in Health Biology from the University of Alcalá
- Master's Degree in Genetics and Cell Biology from the University of Alcalá
- Master's Degree in University Teaching

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Structure and Content

Both the structure and the content of this Postgraduate Certifcate have been developed by the teaching team, who, being specialists in the area of research, are up to date with the needs and demands of the sector. Thanks to this, it has been possible to create a highly innovative and exhaustive program that is at the same time dynamic and multidisciplinary, which will allow the graduate to update their knowledge in research in a guaranteed way in only 150 hours and through the best theoretical, practical and additional material.

In less than 6 weeks you will master the most innovative and complex scientific databases: PEDro, CAB Abstracts, NARIC - Rehabdata, TRIP ASABE, etc"

Module 1. Research in Health Sciences

1.1. Scientific Research I. The Scientific Method
- 1.1.1. Scientific Research
- 1.1.2. Research in Health Sciences
- 1.1.3. The Scientific Method

1.2. Scientific Research II. Typology
- 1.2.1. Basic Research
- 1.2.2. Clinical Research
- 1.2.3. Translational Research

1.3. Evidence-Based Medicine
- 1.3.1. Evidence-Based Medicine
- 1.3.2. Principles of Evidence-Based Medicine
- 1.3.3. Methodology of Evidence-Based Medicine

1.4. Ethics and Legislation in Scientific Research. Declaration of Helsinki
- 1.4.1. The Ethics Committee
- 1.4.2. Declaration of Helsinki
- 1.4.3. Ethics in Health Sciences

1.5. Scientific Research Results
- 1.5.1. Methods
- 1.5.2. Rigor and Statistical Power
- 1.5.3. Scientific Results Validity

1.6. Public Communication
- 1.6.1. Scientific Societies
- 1.6.2. Scientific Conferences
- 1.6.3. Communication Structures

1.7. Funding in Scientific Research
- 1.7.1. Structure in Scientific Projects
- 1.7.2. Public Financing
- 1.7.3. Private and Industrial Funding

1.8. Scientific Resources in Literature Searching. Health Sciences Databases I
- 1.8.1. PubMed-Medline
- 1.8.2. Embase
- 1.8.3. WOS and JCR
- 1.8.4. Scopus and Scimago
- 1.8.5. Micromedex
- 1.8.6. MEDES
- 1.8.7. IBECS
- 1.8.8. LILACS
- 1.8.9. CSIC Databases: ISOC and ICYT
- 1.8.10. BDENF
- 1.8.11. Cuidatge
- 1.8.12. CINAHL
- 1.8.13. Cuiden Plus
- 1.8.14. Enfispo
- 1.8.15. NCBI (OMIM, TOXNET) and NIH (National Cancer Institute) Databases

1.9. Scientific Resources in Literature Searching. Health Sciences Databases II
- 1.9.1. NARIC - REHABDATA
- 1.9.2. PEDro
- 1.9.3. ASABE: Technical Library
- 1.9.4. CAB Abstracts
- 1.9.5. CSIC-Indexes
- 1.9.6. Centre for Reviews and Dissemination (CRD) Databases:
- 1.9.7. Biomed Central BMC
- 1.9.8. ClinicalTrials.gov
- 1.9.9. Clinical Trials Register
- 1.9.10. DOAJ- Directory of Open Access Journals
- 1.9.11. PROSPERO (International Prospective Register of Systematic Reviews)
- 1.9.12. TRIP
- 1.9.13. LILACS
- 1.9.14. NIH. Medical Library
- 1.9.15. Medline Plus
- 1.9.16. OPS

1.10. Scientific Resources in Literature Searching III. Search Engines and Platforms
- 1.10.1. Search Engines and Multisearch Engines
  - 1.10.1.1. Findr
  - 1.10.1.2. Dimensions
  - 1.10.1.3. Google Scholar
  - 1.10.1.4. Microsoft Academic
- 1.10.2. WHO International Clinical Trials Registration Platform (ICTRP)
  - 1.10.2.1. PubMed Central PMC
  - 1.10.2.1. Open Science Collector (RECOLECTA)
  - 1.10.2.2. Zenodo
- 1.10.3. Doctoral Thesis Search Engines
  - 1.10.3.1. DART-Europe
  - 1.10.3.2. Dialnet-Doctoral Theses
  - 1.10.3.3. OATD (Open Access Theses and Dissertations)
  - 1.10.3.4. TDR (Doctoral Theses Online)
  - 1.10.3.5. TESEO
- 1.10.4. Bibliography Managers
  - 1.10.4.1. Endnote Online
  - 1.10.4.2. Mendeley
  - 1.10.4.3. Zotero
  - 1.10.4.4. Citeulike
  - 1.10.4.5. Refworks
- 1.10.5. Digital Social Networks for Researchers
  - 1.10.5.1. Scielo
  - 1.10.5.2. Dialnet
  - 1.10.5.3. Free Medical Journals
  - 1.10.5.4. DOAJ
  - 1.10.5.5. Open Science Directory
  - 1.10.5.6. Redalyc
  - 1.10.5.7. Academia.edu
  - 1.10.5.8. Mendeley
  - 1.10.5.9. ResearchGate
- 1.10.6. Social Web 2.0 Resources
  - 1.10.6.1. Delicious
  - 1.10.6.2. SlideShare
  - 1.10.6.3. YouTube
  - 1.10.6.4. Twitter
  - 1.10.6.5. Health Science Blogs
  - 1.10.6.6. Facebook
  - 1.10.6.7. Evernote
  - 1.10.6.8. Dropbox
  - 1.10.6.9. Google Drive
- 1.10.7. Scientific Journal Publishers and Aggregators Portals
  - 1.10.7.1. Science Direct
  - 1.10.7.2. Ovid
  - 1.10.7.3. Springer
  - 1.10.7.4. Wiley
  - 1.10.7.5. Proquest
  - 1.10.7.6. Ebsco
  - 1.10.7.7. BioMed Central

05

Methodology

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

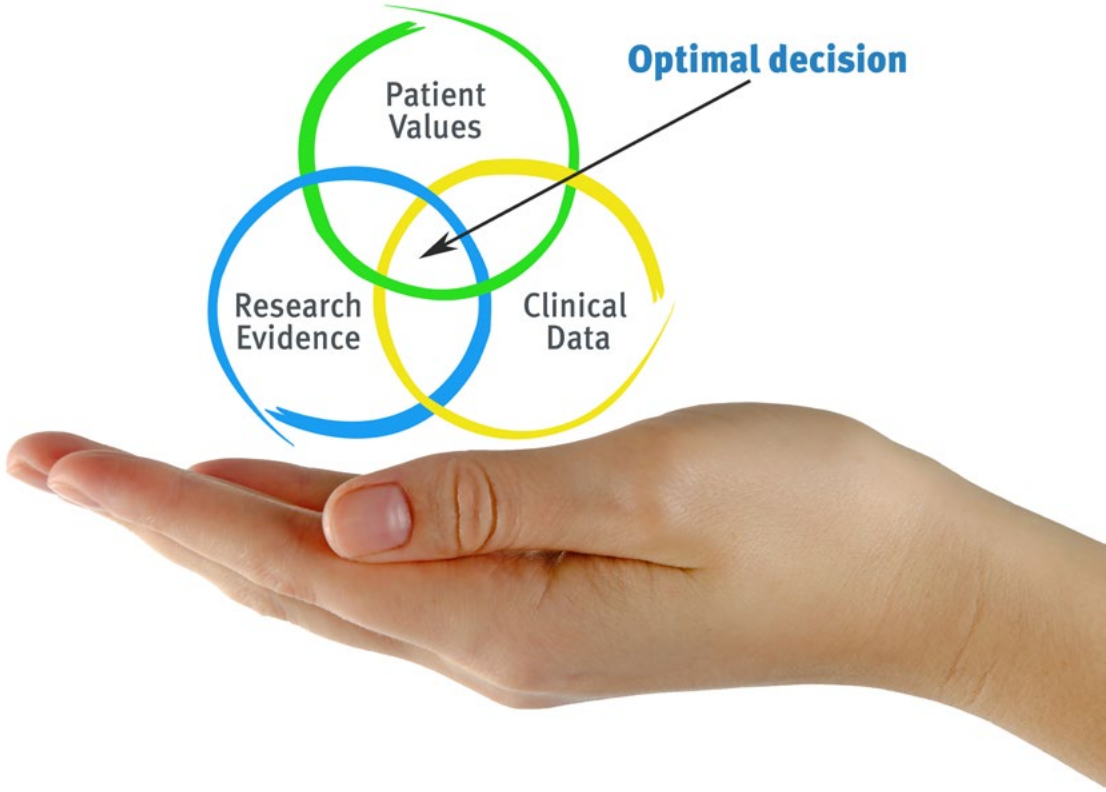
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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

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. Physiotherapists/kinesiologists 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 of professional physiotherapy 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:

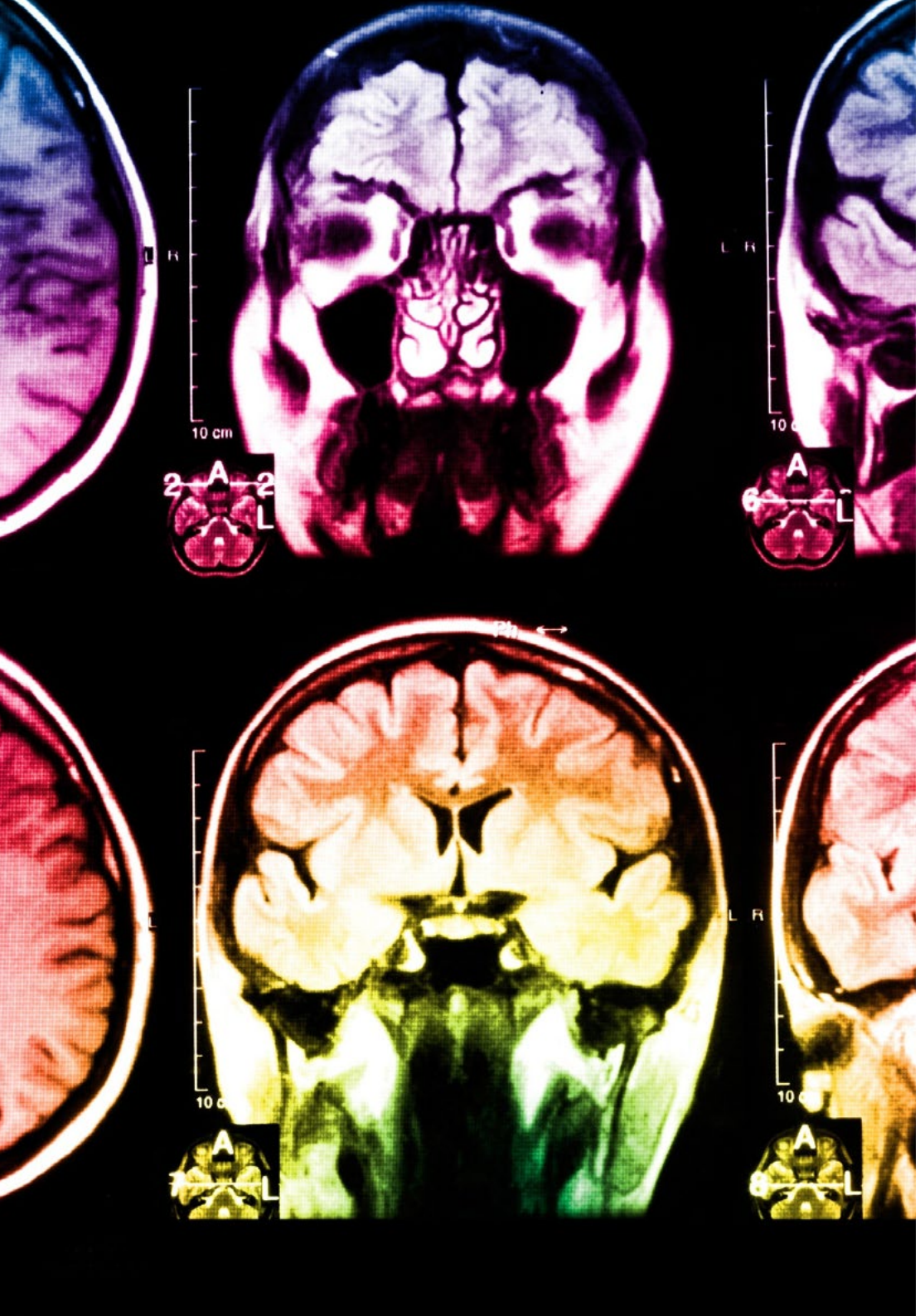
1. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist to better integrate 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.

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



At the forefront of world teaching, the 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 we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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 our 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 really 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.

Physiotherapy Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. 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 them as many times as you want.

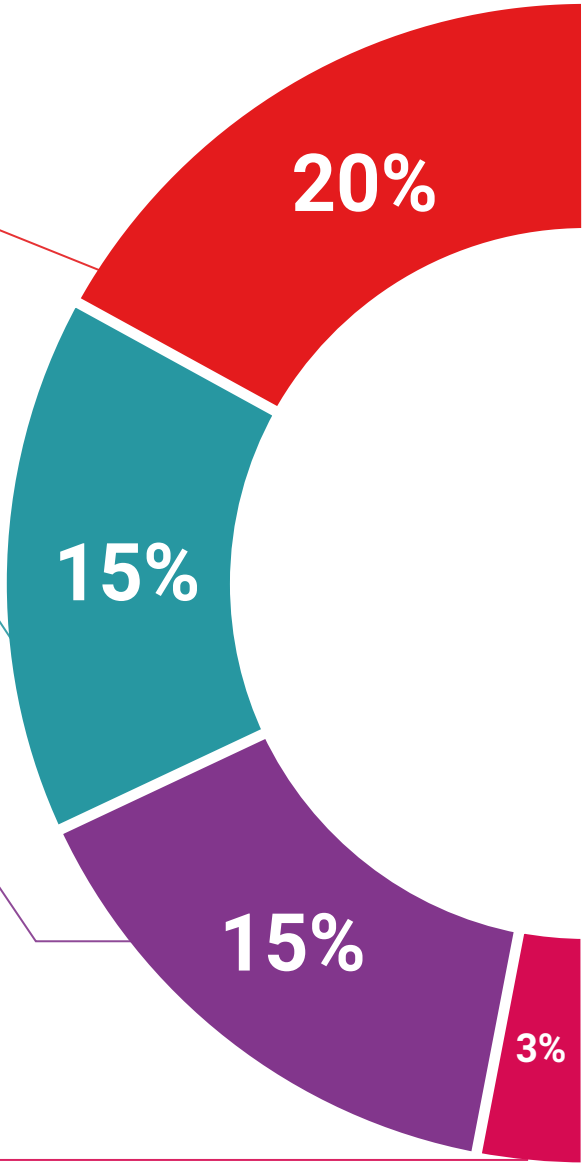
Interactive Summaries

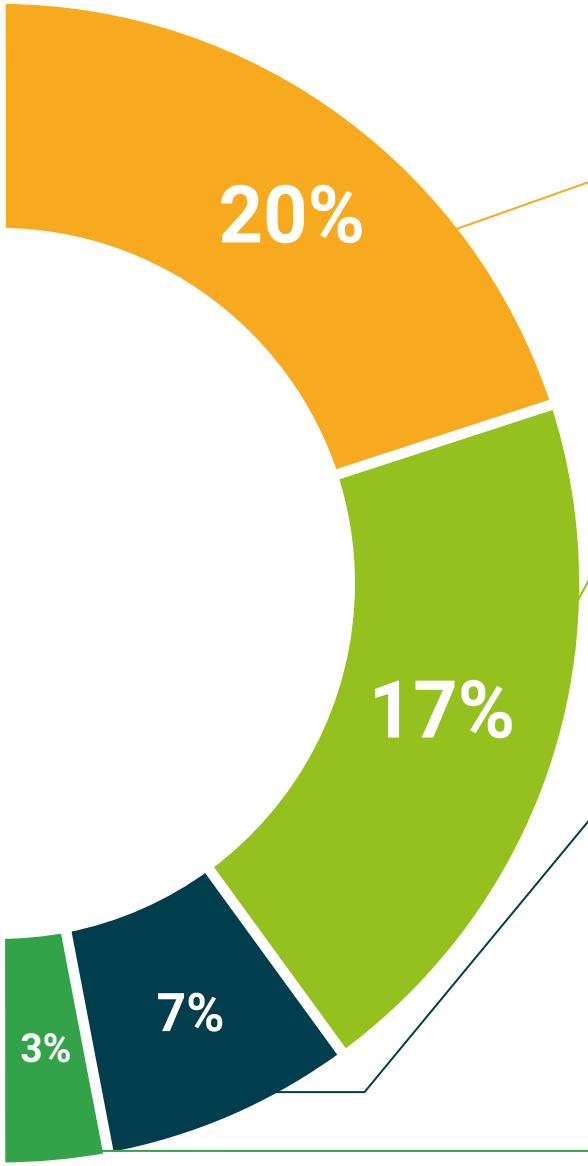
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This unique multimedia content presentation training system 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 Research in Health Sciences guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Research in Health Sciences** contains the most complete and up-to-date scientific program on the market.

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

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

Title: **Postgraduate Certificate in Research in Health Sciences**

Official Nº of Hours: **150 h.**


tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Research in Health Sciences

This is a qualification awarded by this University, equivalent to 150 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

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

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

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