

# Postgraduate Certificate

## Research in Health Sciences



## Postgraduate Certificate Research in Health Sciences

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

Website: [www.techtute.com/us/nursing/postgraduate-certificate/research-health-sciences](http://www.techtute.com/us/nursing/postgraduate-certificate/research-health-sciences)

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# 01

# Introduction

Health Sciences research is one of the key processes in clinical development. This discipline focuses on health-related problems and problem solving. Investment in this area is as important as the qualification of the professionals who carry it out. For this reason, and given the emerging epidemiological diseases, the health care labor market demands health care professionals educated in social and health sciences and capable of intervening in crisis situations as quickly as possible. TECH offers a complete and rigorous program that delves into scientific research, the communication of its results and the resources used by specialists to advance in clinical trials. It is a unique opportunity that, being 100% online, allows the pace of study to be adapted to the personal and professional needs of its target audience: graduates in Nursing.





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*With this Postgraduate Certificate you will be able to acquire techniques to advance your research in the area of Health Sciences in only 6 weeks and with the support of E-health experts”*

International clinical trial registry platforms are one of the many tools that help specialists to share and compare their medical research. These studies cover all fields of clinical medicine, so it is necessary that those conducting the trials correspond to highly qualified people in the biomedical, pharmacological, genetic and many other areas.

The closest evidence of the need for such research can be found in the discovery of the COVID vaccine. The speeding up of this process in times of COVID has been possible thanks to digital intervention and biomedicine. Investment in research and legislation in this field has also been crucial to its evolution. Hence, it is increasingly necessary to update the knowledge of nurses in the e-health field.

This program offers all the knowledge in scientific research and its tools so that graduates in Nursing who are interested in dedicating themselves to this area can obtain rigorous instruction. TECH has resorted to experts in the sector to teach the subject and, in addition, has developed it through a 100% online modality, to allow its study from anywhere in the world. It is a unique opportunity for those who are committed to technological advances and who opt for a telematic specialization that will prevent them from having to do without other areas of their personal and professional life.

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:

- ♦ Development of case studies presented by experts in clinical, medical and pharmacological 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
- ♦ The practical exercises where the self-evaluation process can be carried out 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



*Don't wait any longer, opt for a specialization that adapts to you and the digital paradigm so that you can apply Big Data in Health and Social Science"*

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*Apply sophisticated scientific methods, thanks to the guidance of experts who work in the real field of action”*

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.

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

The design of this program focuses on Problem-Based Learning, in which the professional will have to try to solve the different professional practice situations that will arise throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

*Include in your clinical trials the processing of data from renowned platforms such as Medline, thanks to TECH.*

*Discover now the possibilities offered by ICTs and Big Data in a health care area that is constantly changing.*



# 02 Objectives

The main objective of this Postgraduate Certificate in Research in Health Sciences is to expand and update the knowledge of clinical specialists, so that they can optimize their research in the health area. In just 6 weeks, students will learn the keys to streamline processes thanks to Big Data, scientific social networks, bibliographic managers, among many other tools. In this way, the nurse will develop based on the statistical and analytical rigor of research, applying health deontology.







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*Meet your objectives, thanks to a 100% online program with which you will put into practice, with only an electronic device, the bibliographic search of material needed in clinical trials”*



## General Objectives

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- ♦ Develop key concepts of medicine that serve as a vehicle to understand clinical medicine
- ♦ Determine how to obtain metrics and tools for health care 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

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- ◆ 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



*Enroll now to perfectly interpret the scientific methodology that will be useful to you when developing your own research”*

# 03

# Course Management

TECH has called upon an experienced teaching team in the area of E-Health, so that these professionals can transmit all their knowledge, both theoretical and practical, to the students. They are experts in radiophysics and biomedicine, who have their own technological research projects applied to the medical area. Additionally, the students will have a direct communication channel through which they will be able to ask any questions they may have on the subject. In this way, the specialists will delve into all the bibliographic, informative and legal details of research in health sciences. All this, by means of audiovisual materials that will boost their study, giving them access to scientific essays and practical examples.





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*Get support from professionals who are already working in the research sector, so that you can become a much more competitive specialist in the labor market”*

## Management



### Ms. Sirera Pérez, Ángela

- ♦ Biomedical Engineer Expert in Nuclear Medicine and Exoskeleton Design
- ♦ Designer of specific parts for 3D printing at Technadi
- ♦ Technician of the Nuclear Medicine Area of the University Clinic of Navarra
- ♦ Degree in Biomedical Engineering from the University of Navarra
- ♦ MBA and Leadership in Health care and Medical Technology Companies

## Professors

### D. Beceiro Cillero, Iñaki

- ♦ Intelligence, Strategy and Privacy Analysis Specialist
- ♦ Biomedical Researcher
- ♦ Collaborating Researcher at AMBIOSOL Group
- ♦ Master's Degree in Biomedical Research
- ♦ Degree in Biology by the University of Santiago de Compostela



# 04

# Structure and Content

The contents of this program are a source of knowledge for the nursing graduates who enroll. The syllabus of this program not only delves into scientific research, but also emphasizes the most efficient tools and resources for it. It deals with storage resources, data processing, virtual networks for scientific dissemination, public and private registry systems for different health sciences, among many other issues. This is what makes the TECH experience so enriching, which encompasses a complete academic environment that you will only have to access with one click to further specialize in your profession.







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*A syllabus consciously designed to educate you under the rigorous and authoritative knowledge in Research in Health Sciences”*

## 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:
  - 1.8.10. BDEF
  - 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 BORRAR
  - 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 (Registro Internacional Prospectivo de Revisiones Sistemáticas)
  - 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
    - 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



*A Postgraduate Certificate that, in only 6 weeks, will offer you the most useful ICTs for you to apply them to the Social and Health Care field”*

05

# Methodology

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

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





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

## At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

*With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing practice.

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

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

1. Nurses 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 nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.



*The nurse 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 have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical 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 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 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.



### Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this 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 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 suggesting that observing third-party experts can be useful.

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 Global University.



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

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

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

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

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

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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

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



**Postgraduate Certificate**  
Research in  
Health Sciences

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