

Postgraduate Certificate Health Science Research



Postgraduate Certificate Health Science Research

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

Website: www.techitute.com/us/medicine/postgraduate-certificate/health-science-research

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

All the discoveries and technologies that are implemented within the health area are thanks to the exhaustive research that allowed to achieve great advances in this field. Even today, many professionals focus their efforts on the continuous study of elements that are directly involved with the medical sciences and with this academic program you will be able to broaden your knowledge to become part of teams in this field. This, because the syllabus brings together the most relevant and updated theoretical and practical concepts on the inquiry exercise, so that students will be able to strengthen their skills during the program. All this, through a 100% online methodology that will allow the trainee to have more control over their time.





“

Enhance your professional career and become an integral researcher in the field of medicine, thanks to this Postgraduate Certificate"

This Postgraduate Certificate in Health Science Research is an opportunity for students who have previous knowledge in this field, because they will acquire a solid training in the process of inquiry and related aspects. All this, thanks to the fact that the syllabus of this degree covers a wide range of topics, ranging from scientific methodology, the most appropriate way to make public communication of the results found and administration of the resources that finance the process.

During the program you will learn concepts of scientific inquiry, which will allow you to develop a more effective method and obtain more accurate results. In addition, you will master the most commonly used types of research within this field of study, which are basic, clinical and translational, as well as evidence-based medicine. Likewise, the student will approach the existing resources for the search of bibliographic material, with the objective of developing advanced skills in the management of the different databases, search engines and platforms that provide relevant information on Health Sciences.

All this will be acquired 100% online thanks to the Relearning methodology, a benefit that will give you the possibility to study from the comfort of your home and have access 24 hours a day to the multimedia resources that you will find in the virtual campus. In addition, you will have an excellent staff of professors who will provide you with the current panorama of this sector, an element that will allow you to strengthen your professional skills.

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

- ♦ Case studies presented by experts in Health Science 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
- ♦ The availability of access to content from any fixed or portable device with an Internet connection



If excellence is your goal, TECH will provide you with everything you need to achieve it. Start now and be part of tomorrow's professionals"

“

Expand the theoretical framework for the research you develop thanks to the knowledge in bibliographic resources that this program will introduce you to"

The program's teaching staff includes professionals from 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 provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

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

A Postgraduate Certificate aimed at health professionals who are searching for the next Nobel Prize in Medicine.

From the comfort of your home and with an average of didactic resources, the health professional will be able to acquire a more specialized knowledge.



02 Objectives

The main objective of this Postgraduate Certificate in Health Science Research is to provide the student with the most relevant practical elements at the time of carrying out a process of collecting and organizing information. Therefore, you will have the opportunity to broaden your knowledge in this area and be updated in a comprehensive way on the characteristics of this field, by means of the didactic resources that TECH has prepared especially for this degree.





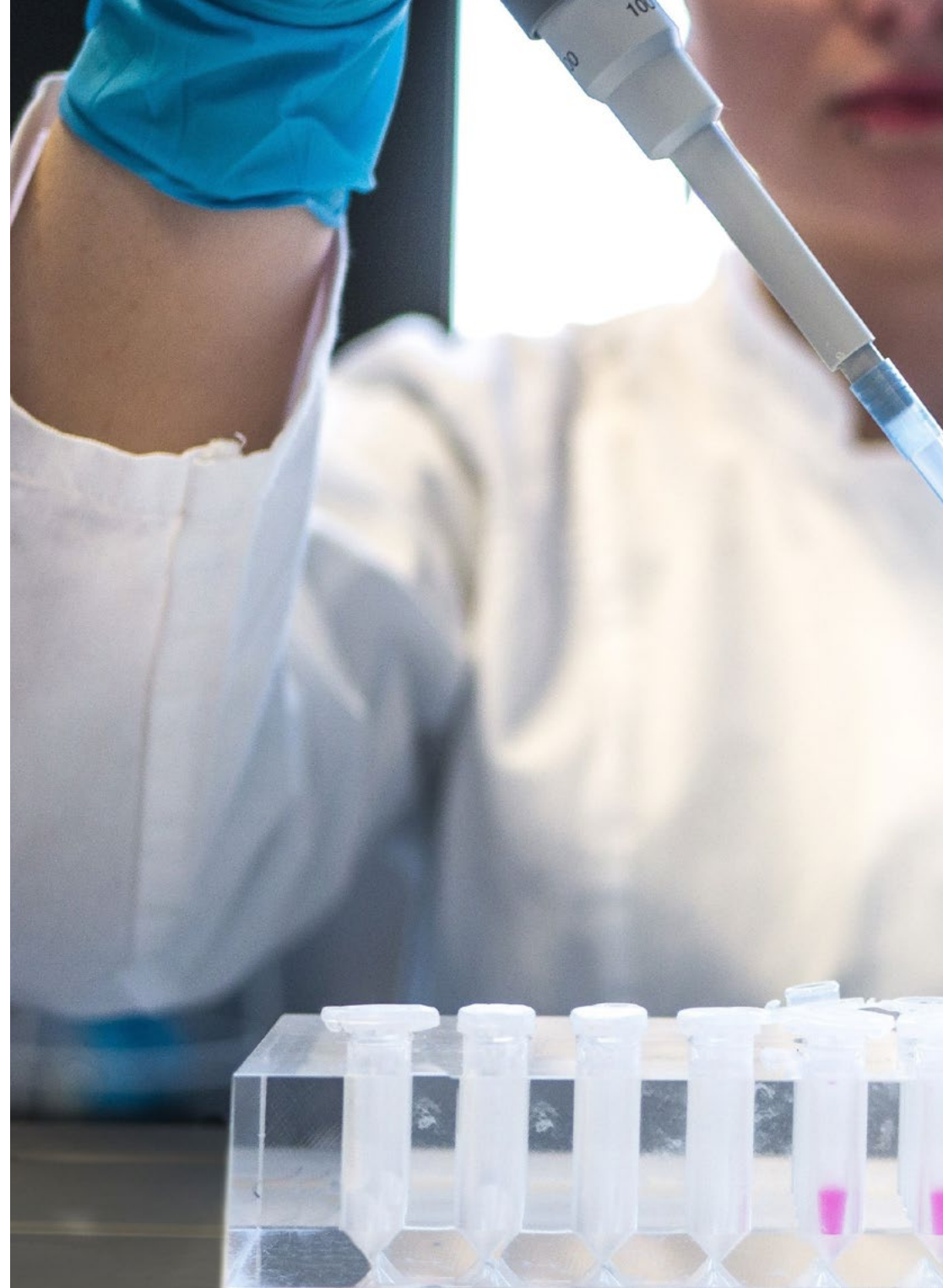
“

Master the concepts of Scientific Research to perfection and become an expert in this field through this complete training"



General Objectives

- Develop key concepts of medicine that serve as a vehicle to understand clinical medicine
- Determine the major diseases affecting the human body classified by apparatus or systems, structuring each module into a clear outline of pathophysiology, diagnosis, and treatment
- Understand the basics of basic and translational scientific methodology
- Identify and generate the means of funding, assessing and disseminating scientific research
- Define the applications of computation and its implication in bioinformatics
- Provide the necessary resources to practically apply all the concepts in the modules
- Develop the fundamental concepts of databases
- Delve into the most important techniques in research





Specific objectives

- Determine the need for scientific research
- Interpret scientific methodology
- Specify the need for types of Health Science Research, 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

“

You set the limits and TECH the means to overcome them. Do not wait any longer and dive into a vast sea of knowledge that will help you enhance your career”

03

Course Management

The excellent team of teachers selected by TECH for this degree is made up of the best experts in this field, who will lead the professional to successfully achieve the update of the latest conceptual elements in the field of Health Science Research. In addition, the professors profiles have an interesting multidisciplinary nature, according to the proposed objectives of the degree program, which will provide the student with a real context of what happens within this area of study.





“

With the best professionals in Scientific Research, you will learn the most essential methodological elements to carry out an in-depth study on medicine"

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



04

Structure and Content

The contents that are part of the academic agenda of this Postgraduate Certificate have been developed by the best experts in this area, in order to provide students the knowledge that are most at the forefront in E-Health and Big Data. In this way, they will deepen in the Research advances focused on Health Science, by means of the study of multimedia resources that will provide them with the fundamental aspects on the elements that compose an observation process.





“

Deepen your knowledge of the nuances involved in conducting scientific research and become an expert in this field, thanks to this degree"

Module 1. Health Science Research

- 1.1. Scientific Research I. The Scientific Method
 - 1.1.1. Scientific Research
 - 1.1.2. Health Science Research
 - 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. 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
 - 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



Slowly and calmly. This is the way you will be able to keep up to date with the latest developments in this area by studying at your own pace"

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. 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:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

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



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Surgical Techniques and Procedures on Video

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



Interactive Summaries

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

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06

Certificate

The Postgraduate Certificate in Health Science Research 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 Health Science Research** 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 Health Science Research**

Official N° of Hours: **150 h.**



*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.

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



Postgraduate Certificate Health Science Research

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

Postgraduate Certificate Health Science Research