# Postgraduate Certificate Medical Information





# Postgraduate Certificate Medical Information

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

Website: www.techtitute.com/us/medicine/postgraduate-certificate/medical-information

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06 Certificate

# 01 Introduction

Nowadays, information flows at a greater speed and quantity thanks to new technologies. Moreover, in the field of health, the pharmaceutical industry is one of the main providers of medical information. However, given this constant flow of data, it is essential to manage the tools and scientific bibliographic sources that guarantee the quality, equity and balance of the information that reaches health professionals. In this scenario, it is essential that professionals are up to date on medical information. This is why this 100% online program was born, which provides advanced and intensive knowledge about the publication and search management processes through innovative multimedia content that can be accessed 24 hours a day. , from any electronic device with an internet connection.

# Introduction | 05 tech

Enroll in a 100% online Postgraduate Certificate, which you can do comfortably, whenever and wherever you want"

# tech 06 | Introduction

Searching and sending scientific literature requested by health professionals and internal clients, the management of bibliographic search tools, the management of Medical Information metrics (KPIs) or support in the management of bibliographic alerts of a medical department are just some of the functions and responsibilities of the Medical Information Department.

Nevertheless, new technologies have had a notable influence not only on the digitalization process of these areas, but also on the amount of information available in the health care field. Given this panorama of digital transformation and extensive sources, it is necessary for professionals to be up to date on developments in this area. This is why TECH has decided to create this Postgraduate Certificate in Medical Information.

An advanced and intensive program, where in just 180 teaching hours, the specialist will be able to delve into the impact of the operation of this scientific information service within a multidisciplinary environment. Moreover, through a theoretical-practical syllabus, the professional will delve into the search processes, databases, medical information for the patient, communication with other medical professionals, as well as the extraction and analysis of insight.

All of this will be possible thanks to the multimedia content prepared ad hoc for this university degree by a specialized teaching team with extensive professional experience both in the Pharmaceutical Industry and in information management.

An excellent opportunity that this academic institution offers to all those health care professionals who wish to combine their professional responsibilities with quality university education. All you need is a computer, cell *Tablet* or mobile with internet Connection to access the Syllabus hosted on the virtual platform. An ideal academic option to complete a high-level program in accordance with current academic times.

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

- The development of practical cases presented by experts in Medicine and the Pharmaceutical Industry
- 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



This program will allow you to simulate bibliographic searches in Pubmed and learn the main keys to detecting reliable sources"

### Introduction | 07 tech

A program that provides you with the latest developments in scientific documentation and information for Medical Affairs" You are looking at a 100% online program, without classes with fixed schedules and designed for professionals looking to update their knowledge.

An ideal academic option for you to get up-to-date on medical information query management tools.

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.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

# 02 **Objectives**

This Postgraduate Certificate will allow the professional to enhance their abilities to collaborate with *Medical Advisors*, in the development of medical-scientific content, for Medical Scientific Liaison equipment. This will also lead you to be able to successfully provide scientific support to other medical professionals about the company's products and services. The case studies will show a practical vision, which will lead the specialist to be able to integrate this methodology into their daily practice.



With this Postgraduate Certificate you will be able to enhance your capabilities and skills in the management of medical information"

# tech 10|Objectives



# **General Objectives**

- Know the verbal and written communication of medical information to the professional
- Define and know the concepts of off-label medical information
- Know medical information management for Medical Affairs
- Define the concepts of medical insights
- Investigate data extraction and data mining
- Know the organization of the bibliographic search process







### Specific Objectives

- Describe the most relevant sources or resources of information in biomedicine
- Define concepts to establish the search strategy
- Simulate bibliographic searches in Pubmed
- Define the peer review process in searches

A syllabus with a practical approach that will allow you to propose quality search strategies for scientificmedical information"

# 03 Course Management

In order to effectively carry out the functions and responsibilities of the Medical Information and Publications Department within the Medical Department, it is essential to be aware of the latest developments in the tools and search techniques. This is why TECH has brought together in this Postgraduate Certificate to a team of teachers, who have extensive professional background in the search and data extraction in Medical Affairs departments. Thanks to their extensive knowledge, the specialist who takes this degree will obtain the most up-to-date information.



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# tech 14 | Course Management

### Management



### Dr. Cuchí Alfaro, Miguel Ignacio

- Medical Director of the Puerta de Hierro Majadahonda University Hospital in Spain
- Medical Coordinator of Hospital Audit in the Madrid Service
- Deputy Manager of the Ramón y Cajal University Hospital of Madrid
- Deputy Medical Director of the Ramón y Cajal University Hospital of Madrid
- Degree in Medicine

### Professors

#### Ms. Mota Megía, Noelia

- Medical Affairs Strategy & Operations at Merck
- Production Specialist at Merck
- Master in Medical Affairs, Medical Advisor and Medical Scientific Liaison from the European University (UE)

### Mr. Ruiz López, Francisco

- Head of Medical Strategy & Operations Spain at Merck Group
- MBA in Pharmaceutical Business organized by the Higher School of Pharmaceutical Organization (EPHOS)
- Graduate in Pharmacy from the UCM

### Ms. Álvarez Díaz, Noelia

- Head of Libraries, university Ramón y Cajal Hospital
- Diploma of specialization in management of information sources and scientific innovation
- Online Master in Digital Documentation
- Degree in Documentation from Carlos III University of Madrid
- Diploma in Library and Information from the Complutense University of Madrid

# Course Management | 15 tecin

# 04 Structure and Content

The professionals who have been rigorously selected by TECH to teach this degree have developed a syllabus with a theoretical-practical approach, which will lead the professional to delve into the latest developments in Medical Information. Moreover, the multimedia pills, case studies or essential readings will lead you to delve deeper into the organization of the search process, databases, bibliographic searches in Pubmed or off-label medical information. The Relearning Method applied by TECH will allow you to progress in a much more natural way through the content of this program.

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# Structure and Content | 17 tech

The Relearning method will help you consolidate the knowledge of this program in a much more agile way and reducing long hours of study"

# tech 18 | Structure and Content

### Module 1. Medical Information

- 1.1. Introduction. Organization of the search process
  - 1.1.1. Research Question What is it for?
  - 1.1.2. Objectives of the Search
  - 1.1.3. Bibliographic/material/human resources that we have
- 1.2. Information resources in biomedicine
  - 1.2.1. International sources: Pubmed, Embase, WOS, etc
  - 1.2.2. Sources in the Latin American field: CSIC, Ibecs, LILACS, etc. indices
  - 1.2.3. Sources to locate clinical trials: WHO, ClinicalTrials, CENTRAL of Cochrane, etc
  - 1.2.4. Drug Information Sources: Bot Plus Web, FDA, etc
  - 1.2.5. Evidence: Based Medicine. Uptodate, iloveevidence, Tripdatabase
  - 1.2.6. Other resources: official organizations, websites, scientific societies, associations, evaluation agencies, etc
- 1.3. Databases. Basic concepts to propose quality search strategies
  - 1.3.1. What is a from Database?
  - 1.3.2. Natural language. Term mapping
  - 1.3.3. Controlled language. Thesauri
  - 1.3.4. Boolean Operations
- 1.4. Bibliographic searches in Pubmed
  - 1.4.1. Simple search and exploratory search
  - 1.4.2. Term mapping
  - 1.4.3. Advanced Search
  - 1.4.4. Keys to search
  - 1.4.5. Management of the search strategy and results. Alerts and bibliographic reference managers
- 1.5. Search documentation. Adaptation to other databases
  - 1.5.1. Information necessary to document and make the search replicable
  - 1.5.2. Transparency and quality
  - 1.5.3. Points to take into account to adapt the search of one database to others
  - 1.5.4. Peer review of searches
  - 1.5.5. Search strategy update





### Structure and Content | 19 tech

- 1.6. Medical information for the patient
  - 1.6.1. How to communicate to the patient
  - 1.6.2. Verbal and Written Communication
  - 1.6.3. The leaflet as a basis for responding to patients
- 1.7. Medical information for the HCP
  - 1.7.1. How to communicate to the Healthcare Professional
  - 1.7.2. Verbal and Written Communication
  - 1.7.3. The technical sheet as a basis for responding to the Healthcare Professional
- 1.8. Off-label Medical Information
  - 1.8.1. Definition and Basic Concepts
  - 1.8.2. Data on File
  - 1.8.3. Foreign Medication
  - 1.8.4. Clinical trials, Early Access and access to medicines in special situations
- 1.9. Documentation and Scientific Information for Medical Affairs
  - 1.9.1. Management of requests for scientific documentation for Healthcare Professionals: transfers of value and local regulation
  - 1.9.2. Safeguard copyrights
  - 1.9.3. Medical information as an updating strategy for the medical team
  - 1.9.4. Medical Information in the identification of data gaps
- 1.10. Data extraction and insights analysis
  - 1.10.1. Medical Insights: definition and concepts
  - 1.10.2. Medical information query management tools
  - 1.10.3. Data Storage: Data Privacy
  - 1.10.4. Data Mining



A university program that provides you with the most advanced and up-to-date knowledge about data extraction and insight analysis in the 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.



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"

### tech 22 | 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.

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

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

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.

2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.

- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



# tech 24 | Methodology

### **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 | 25 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.



# tech 26 | Methodology

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.

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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.

# Methodology | 27 tech



### **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.

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### **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 Medical Information 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"

# tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Medical Information** 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 Medical Information Modality: online Duration: 6 weeks Accreditation: 6 ECTS



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

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Medical Information

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