



### Postgraduate Certificate

### Generation of Medical Research Projects

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/pharmacy/postgraduate-certificate/generation-medical-research-projects

# Index

06

Certificate

# 01 Introduction

The generation of scientific research projects is key in the practice of Health Sciences. Generating knowledge about pharmacology is vital to provide patients with drugs that promote their wellbeing. However, research training protocols should be as respected as the clinical trials carried out in them. Faced with the neglect of this aspect and how decisive the formulation of the hypothesis, the presentation of background and the budget approach can be, TECH has developed a specific program for it. A 100% online program investigates the exclusion and inclusion criteria in projects with human samples and the ethical aspects of the same. With this, TECH aims to update the knowledge of Pharmacy graduates and other professionals interested in the generation of research projects, in order to improve their skills in this field.



### tech 06 | Introduction

When developing a research project, the starting point must be known to perfection and even go back to much older studies to clarify the obstacles and advances that the specialists may encounter in their research. This is a way of foreseeing damages that could later cause unnecessary economic losses. In addition, a budget that fits the needs must be generated, because in this way the experts will delimit the field of work being beneficial for the study and, above all, they will consider a time limit that will get the most out of it. This phase is so important that specialists demand programs that focus on it.

For this reason, TECH has designed a complete and rigorous program that delves into the Generation of Medical Research Projects, in order to offer the pharmacological professionals an update in this field. In addition, this program has been designed by a teaching team versed in Medical Research to guarantee the quality of the contents and guarantee an optimal academic instruction of the students. In this line, the graduates will be able to communicate with the teachers through a direct communication channel, through the Virtual Campus, with which they will be able to resolve and discuss all their questions in relation to the subject.

It is a program with 150 hours of audiovisual materials in various formats that offer dynamic and enriching learning to students. In this way, TECH seeks academic rigor under a digital approach that not only adapts to the needs of the specialists, but also makes it easier to follow the study. In this way and being 100% online, the program aims to update the theoretical and practical skills and promote the professional development of the graduates, focusing on praxis. Likewise, the Relearning methodology will prevent students from investing long hours of memorization to assimilate the contents, as they will do it gradually and easily.

This **Postgraduate Certificate in Generation of Medical Research Projects** 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 Medical Research
- 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



Don't wait any longer, go deeper in the establishment of the scientific methodology according to your research and determine its development including new technologies"



TECH's goal is for you to achieve yours, mastering the generation of research projects at local and international level"

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 provide the professionals 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 professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

Don't have time to update your skills because you are working? This is a perfect academic option to perfect your skills without the need to travel or limit your schedule.

Access now 150 hours of the most specific material on the general structure of a project to witness how it influences your final performance.







### tech 10 | Objectives



### **General Objectives**

- Understand the appropriate approach to a question or problem to be solved
- Asses the state of the art of the problem through literature search
- Assess the feasibility of the potential project
- Study the drafting of a project in accordance with the different calls for proposals
- Examine the search for funding
- Master the necessary data analysis tools
- Write scientific articles (papers) for the daily magazines
- Generate posters relevant to the topics addressed
- Know the tools for dissemination to the non-specialized public
- Delve into data protection
- Understand the transfer of knowledge generated to industry or the clinic
- Examine the current use of artificial intelligence and massive data analysis
- Study examples of successful projects





### **Specific Objectives**

- Learn how to assess the feasibility of the potential project
- Know in depth the essential milestones for writing a research project
- Delve into the criteria for exclusion/inclusion in projects
- Learn how to set up the specific team for each project



Do you want to master the establishment of specific teams according to the research project you are facing? Structure them effectively thanks to the keys provided by TECH"





### tech 14 | Course Management

### Management



### Dr. López-Collazo, Eduardo

- The Health Research Institute of La Paz University Hospital (IdiPAZ)
- Scientific Director, Institute of Health Research, University Hospital La PAZ
- President of the IdiPAZ Research Commission
- Member of the External Scientific Committee of the Murcian Institute of Health Research
- Member of the Scientific Commission of FIDE
- Editor of the international scientific journal "Mediators of Inflammation"
- Editor of the international scientific journal "Frontiers of Immunology"
- Coordinator of IdiPAZ Platforms (2010-2013)
- Coordinator of Health Research Funds in the areas of Cancer, Infectious Diseases and HIV

### **Professors**

### Dr. Avendaño Ortiz, José

- Researcher Foundation for Biomedical Research of La Paz University Hospital (FIBHULP/ IdiPAZ)
- Researcher HM Hospitals Foundation (FiHM)
- Master's Degree in pharmacological research from the Autonomous University of Madrid
- PhD in Pharmacology and Physiology from the Autonomous University of Madrid







### tech 18 | Structure and Content

### Module 1. Generation of Research Projects

- 1.1. General Structure of a Project
- 1.2. Presentation of Background and Preliminary Data
- 1.3. Definition of the Hypothesis
- 1.4. Definition of General and Specific Objectives
- 1.5. Definition of the Type of Sample, Number and Variables to be Measured
- 1.6. Establishment of the Scientific Methodology
- 1.7. Exclusion/Inclusion Criteria in Projects with Human Samples
- 1.8. Establishment of the Specific Team: Balance and Expertise
- 1.9. Ethical aspects and Expectations: an Important Element that we Forget
- 1.10. Budget Generation: a fine Tuning between the Needs and the Reality of the Call. cc







A program expressly designed for professionals like you, who wish to perfect their skills in the pharmaceutical field to promote research in it"

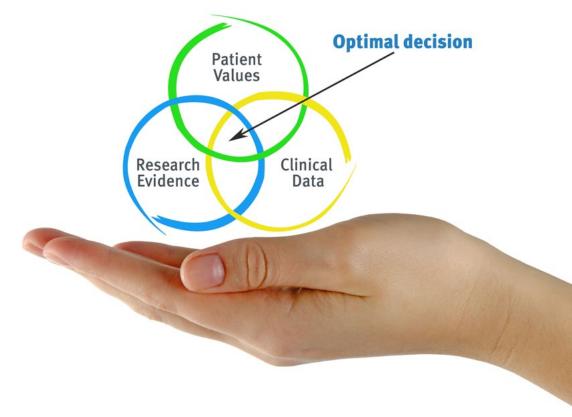


### tech 22 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will be confronted with multiple simulated clinical cases based on real patients, in which they will have to investigate, establish hypotheses and ultimately, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Pharmacists learn better, more quickly 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, attempting to recreate the actual conditions in a pharmacist'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. Pharmacists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their 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.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.

Pharmacists 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.



### 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 115,000 pharmacists have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. This pedagogical methodology is developed in a highly demanding environment, with a university student body with a high socioeconomic profile and an average age of 43.5 years.

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 created specifically for the course by specialist pharmacists who will be teaching the course, so that the didactic development is highly specific and accurate.

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.



#### **Video Techniques and Procedures**

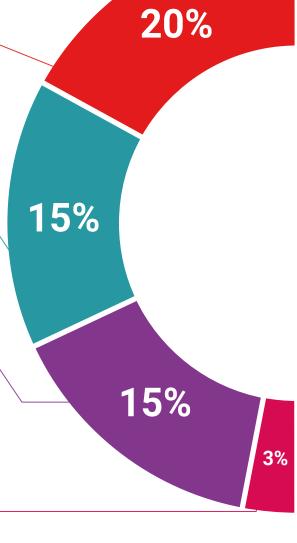
TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current pharmaceutical care procedures. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better understanding. And best of all, you can watch 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.

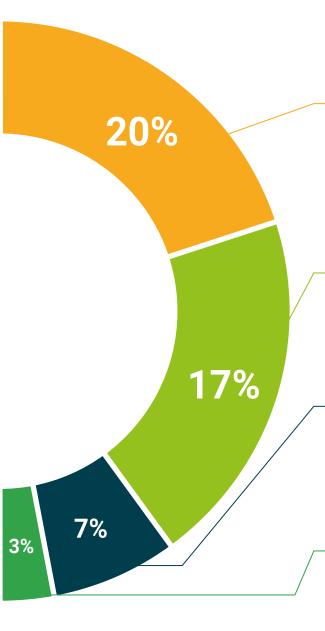
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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, we will present you with real case developments in which the expert will guide you through 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.







### tech 30 | Certificate

This **Postgraduate Certificate in Generation of Medical Research Projects** 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 certificate 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 Generation of Medical Research Projects
Official N° of Hours: **150 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.

technological university Postgraduate Certificate

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