

# Postgraduate Certificate

## New Research Avenues in Inflammatory Bowel Disease



## Postgraduate Certificate New Research Avenues in Inflammatory Bowel Disease

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/new-research-avenues-inflammatory-bowel-disease](http://www.techtute.com/us/medicine/postgraduate-certificate/new-research-avenues-inflammatory-bowel-disease)

# Index

01

Introduction

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*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

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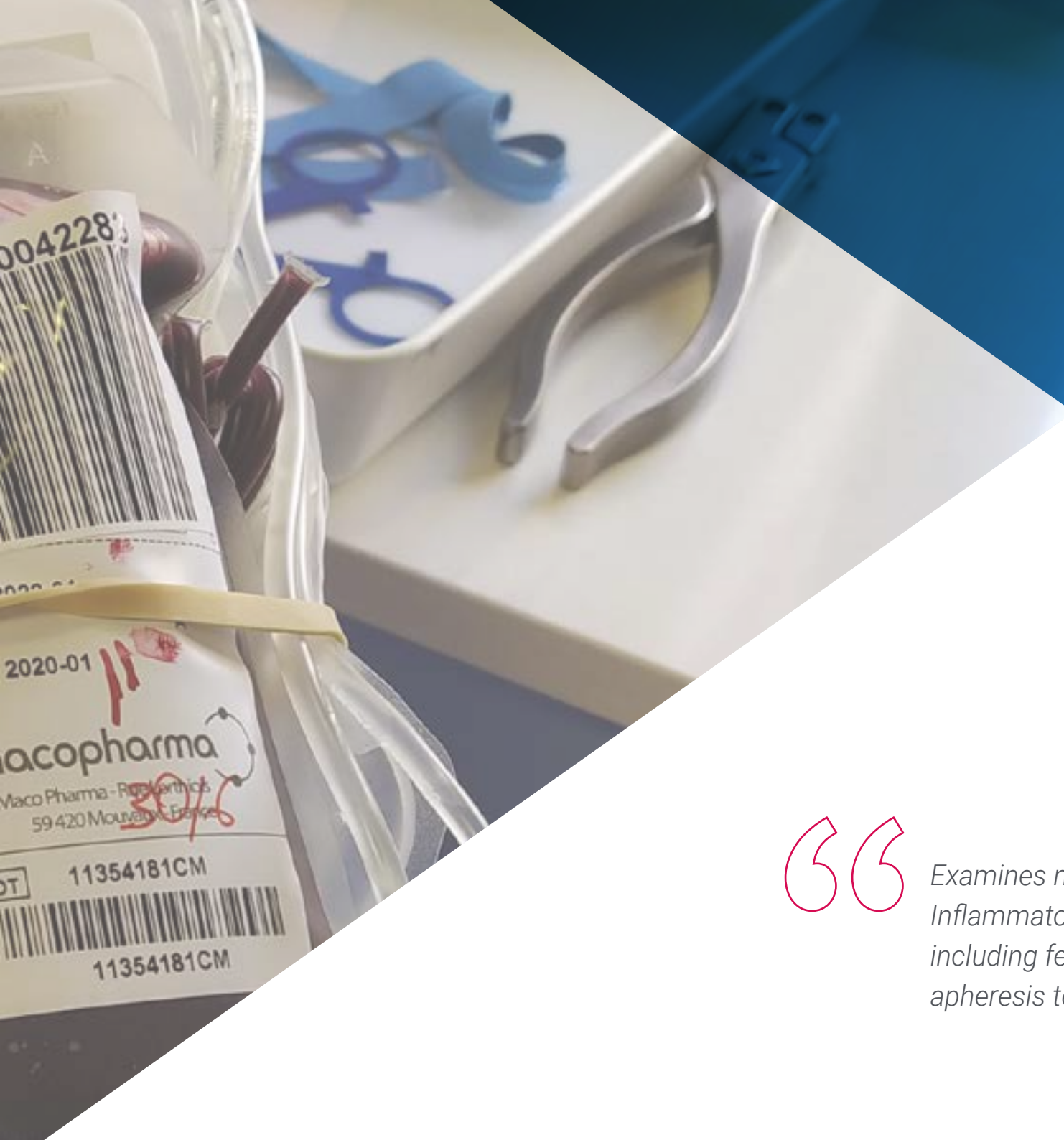
*p. 28*

# 01

# Introduction

Research is essential in all fields of medicine, but in Inflammatory Bowel Disease its value is fundamental, since it is a group of highly variable pathologies. Hence, the need for specialized professionals who are constantly updating their knowledge to keep abreast of the latest advances in the field. For this reason, TECH has developed a multidisciplinary program that covers the New Research Avenues in Inflammatory Bowel Disease, delving into issues such as the use of stem cells, artificial intelligence applied to treatment and diagnosis, or new genes involved in the etiopathogenesis of the disease. All this, in a 100% online, convenient and accessible format, which does not require sacrificing personal or professional life in order to take it on.





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*Examines new treatments for Inflammatory Bowel Diseases, including fecal transplants and apheresis techniques”*

Since medical research never stops and the field of Digestive Medicine is prone to new discoveries at both diagnostic and therapeutic levels, TECH has developed a broad and comprehensive Postgraduate Certificate, delving precisely into new avenues of research. This program is aimed at establishing the lines of research that will mark the future of knowledge of inflammatory bowel diseases in the coming years, something that may seem logical in the case of such a changing and variable group of diseases.

In this way, the student will learn about the concepts of etiopathogenesis, as well as the improvement of complementary tests to establish a diagnosis, without forgetting the different therapeutic options that are currently being investigated and yet to come.

The objective, therefore, is that the student delves into the investigation of new pathophysiological pathways under study regarding new genes involved, factors related to the intestinal microbiota and its relationship with the development of Inflammatory Bowel Disease, as well as new diagnostic techniques related to the progress of digestive endoscopy (confocal microscopy techniques, image magnification or artificial intelligence techniques, among others), focusing also on the new biological routes that will allow to bring to the market new drugs with a more specific action and, consequently, more effective and safer.

The resources in which the content of this Postgraduate Certificate is organized are intended to give it a very practical approach, with the syllabus organized in a module, master classes in videos, as well as the resolution of questions and real clinical cases. All this, in a 100% online format, without face-to-face classes or fixed schedules, always prioritizing the flexibility of the specialist who assumes it.

This **Postgraduate Certificate in New Research Avenues in Inflammatory Bowel Disease** contains the most complete and up-in-date scientific program on the market.

Its most notable features are:

- ◆ The development of case studies presented by experts in inflammatory diseases
- ◆ 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 the self-assessment 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 work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*You will be able to access all the content of the virtual campus 24 hours a day, being able to consult it at your own pace"*

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*Delves into the research avenues of the future in Digestive Medicine, expanding knowledge in precision medicine, artificial intelligence, use of stem cells and 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.

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 education programmed to prepare 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.

*Get up to date on the role of the microbiota and microbiome in the development of inflammatory bowel diseases thanks to this Postgraduate Certificate.*

*You will have the freedom to adapt the course load to your own pace, without having to attend classes or fixed schedules.*



# 02 Objectives

Being the field of Digestive Medicine a broad one and open to all types of research, the aim of this program is precisely to focus on new avenues and developments concerning Inflammatory Bowel Diseases. Therefore, students will learn about the main biological treatments, apheresis techniques or precision medicine, among other issues of special interest.







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*You will reach your updating goal even sooner than you expect, thanks to a teaching methodology perfected by TECH”*



## General Objectives

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- ◆ Update the knowledge of the origin, as well as the current scientific state of diagnosis and treatment of Inflammatory Bowel Disease
- ◆ Keep abreast of new developments in the field of Inflammatory Digestive Diseases

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*Incorporate the latest developments and discoveries in Inflammatory Bowel Diseases into your daily research practice”*





## Specific Objectives

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- ◆ Update research studies in genetics, etiopathogenesis, gut microbiota relationship and nutrigenomics with Inflammatory Bowel Disease
- ◆ Update clinical trials with drugs that explore new routes of action against inter- and intracellular communication molecules
- ◆ Specialize the student in new endoscopic techniques, as well as artificial intelligence prototypes that may be useful for use in patients with Inflammatory Bowel Disease

03

# Course Management

This Postgraduate Certificate has the endorsement of first-class teaching staff, specifically chosen by TECH due to their academic and professional trajectory. This provides an indispensable practical insight into the New Research Avenues in Inflammatory Bowel Disease, as the specialist will have access to detailed videos on the latest developments and research.



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*Discover the most promising avenues of research in Inflammatory Bowel Disease thanks to a world-class faculty”*

## International Guest Director

Considered as one of the best doctors by the Castle Connolly, Dr. Gil Melmed is a renowned Gastroenterologist highly specialized in the approach of Inflammatory Bowel Diseases. In this way, he has developed most of his career in health entities of international reference among which stands out the Cedars-Sinai Medical Center in California.

Among his main achievements, he has used innovative Computer Aided Detection devices in multiple colonoscopies. Therefore, he has demonstrated that these technological tools pertaining to Artificial Intelligence can significantly increase the identification of Adenomas or Polyps and improve the prevention of Colorectal Cancer. Along the same lines, he has promoted the IBD QORUS Quality Improvement Program, focused on the implementation of excellent practices and quality standards in the treatment of patients with Inflammatory Bowel Disease. Thanks to this, it has managed to optimize both medical results and user experience.

He also balances this work with his role as a clinical researcher. In fact, he has developed numerous studies focused on subjects such as new treatments for the management of chronic inflammation of the intestine, cutting-edge procedures aimed at perfecting postoperative care or techniques that ensure that individuals' responses to vaccines are effective and safe. Consequently, he has spearheaded a number of sophisticated strategies that have enabled individuals to experience adequate recovery following their surgical procedures.

Committed to the advances in this health field, he participates as a speaker in different international scientific congresses. There he has shared his experience using advanced diagnostic tests, such as Balloon Enteroscopy. He has also increased the knowledge of health professionals on the most optimal methods to treat Crohn's Disease and Ulcerative Colitis.



## Dr. Melmed, Gil

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- Director of Clinical Trials at the Center for Inflammatory Bowel Diseases at Cedars-Sinai Medical Center in Los Angeles, California
- President of the American Gastroenterological Association's Committee on Inflammatory Bowel Diseases
- Clinical Investigator at Cedars-Sinai Medical Center
- Editor of the "American Journal of Gastroenterology"
- Residency at Cedars-Sinai Medical Center
- M.D. from Albert Einstein College of Medicine
- Master of Science in Clinical Research, University of California, California
- B.S. in Medical Sciences, University of Pennsylvania
- Fellowship in Gastroenterology from University of California
- Board Certified by the American Board of Internal Medicine
- Crohn's and Colitis Foundation National Scientific Advisory Board
- Co-Chair of the IBD QORU Quality Improvement Program



*Thanks to TECH, you will be able to learn with the best professionals in the world"*

# 04

## Structure and Content

The Relearning method used by TECH for the development of all the contents of this Postgraduate Certificate greatly facilitates the work of the student involved. Key concepts around new avenues of research in inflammatory bowel diseases are given progressively throughout the program, resulting in a much more progressive and natural update. This also avoids having to invest extensive study hours in taking on the entire course load and can be devoted to all the additional material provided.





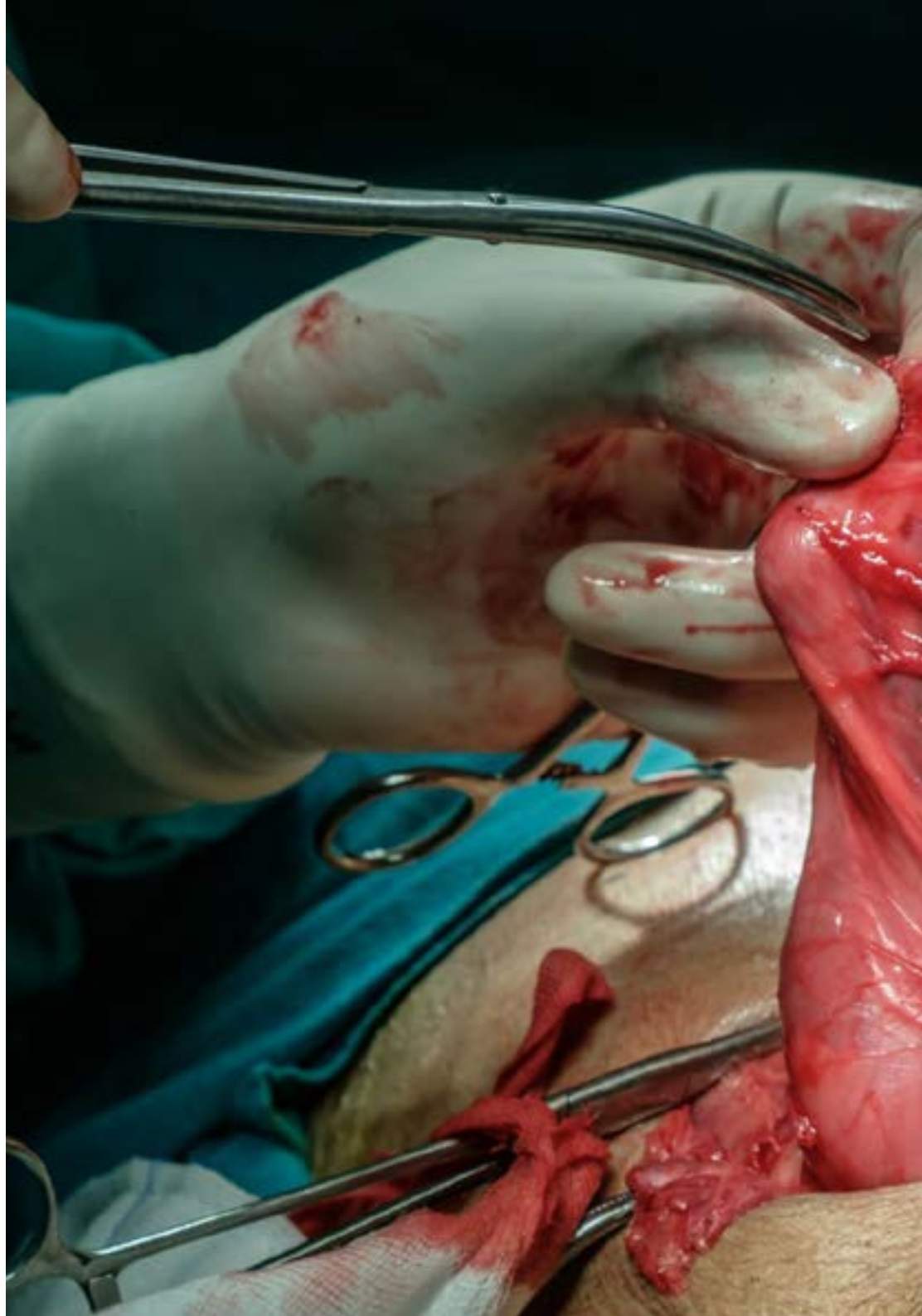


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*You will be able to download all the content from the comfort of your tablet, smartphone or computer of choice, requiring only that you have an internet connection"*

## Module 1. New Research Avenues in Inflammatory Bowel Disease

- 1.1. Etiopathogenesis: New Genes Involved
- 1.2. Predisposing Pathways to Inflammatory Mechanisms
- 1.3. Role of the Microbiota and the Microbiome in the Development of Inflammatory Bowel Disease
- 1.4. Fecal Transplantation in Inflammatory Bowel Disease
- 1.5. Nutrigenomics in Inflammatory Bowel Disease
- 1.6. New Biological Treatments in Inflammatory Bowel Disease
- 1.7. Stem Cells and Inflammatory Bowel Disease
- 1.8. Apheresis Techniques in Inflammatory Bowel Disease
- 1.9. Precision Medicine. Systems Biology
- 1.10. Artificial Intelligence in Inflammatory Bowel Disease





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*You will have access to 180 hours of learning content including video summaries, simulated and real cases, self-awareness exercises and much more"*

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 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. Gervas, 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.



## 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 New Research Avenues in Inflammatory Bowel Disease 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 New Research Avenues in Inflammatory Bowel Disease** 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.

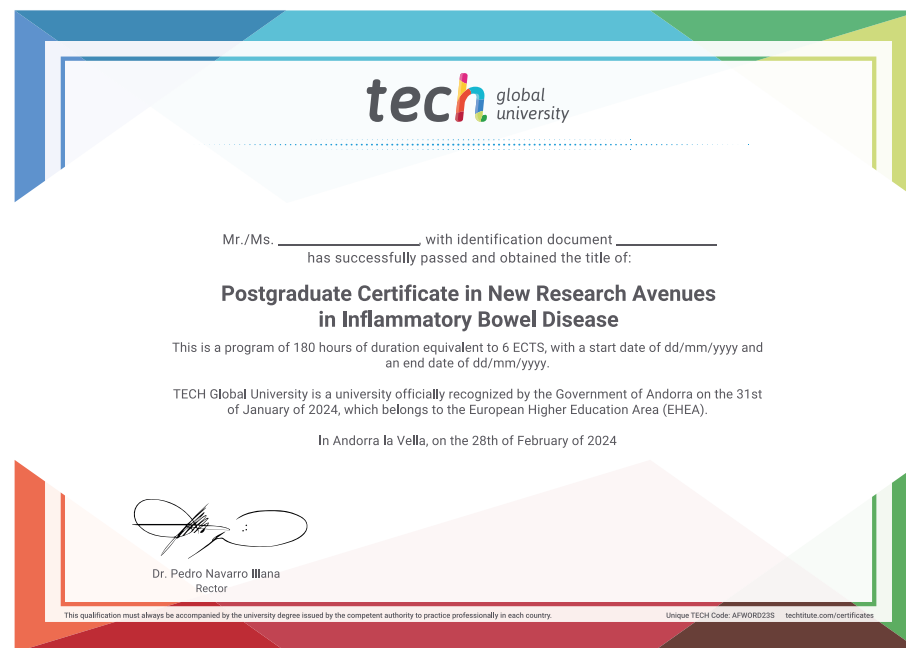
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in New Research Avenues in Inflammatory Bowel Disease**

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.

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



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New Research Avenues  
in Inflammatory  
Bowel Disease

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

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