



Surgery, Treatments and New Research Avenues in Inflammatory Bowel Diseases

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

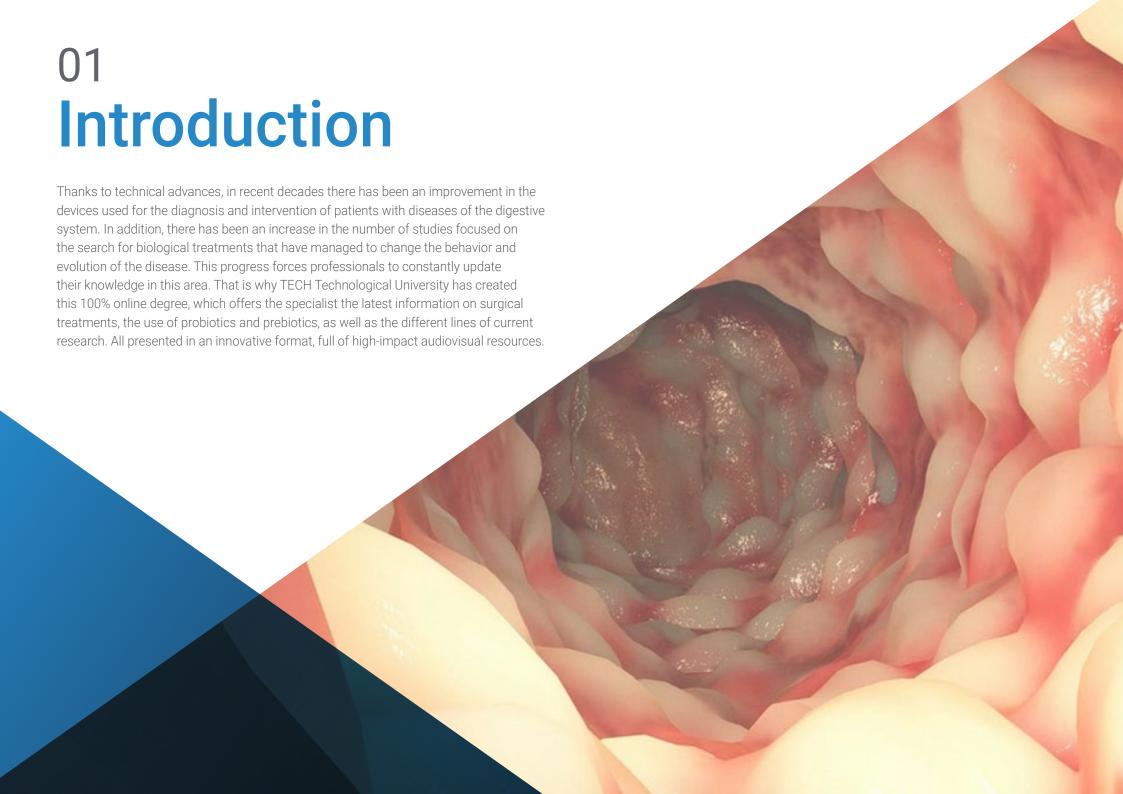
We bsite: www.techtitute.com/us/medicine/postgraduate-diploma/surgery-treatments-new-research-avenues-inflammatory-bowel-diseases

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## tech 06 | Introduction

The complexity of surgical treatments in patients with inflammatory digestive pathologies, the presentation of comorbidities and complications has decreased in recent years, thanks to the improvement of diagnostic and interventional techniques. In addition, scientific studies have made it possible to trace different treatment routes with biological drugs that act against different inter- and intracellular mediators of the disease, such as TNF- $\alpha$ , different interleukins or the JAK protein, among others.

Given this reality, there is no doubt that medical professionals must be aware of the advances that are being made in the approach to patients with inflammatory digestive diseases. For this reason, this academic institution offers this University Expert, which will lead you to obtain the most exhaustive and scientific information on Surgery, Treatments and New Research Avenues in Inflammatory Bowel Diseases.

A program that will allow them to keep abreast of the main lines of research that will mark the future of knowledge of the disease in the coming years, both in concepts of etiopathogenesis, and in improving complementary tests to establish diagnosis.

To this end, the specialists will be provided with innovative pedagogical resources. These will lead them to deepen studies on new pathophysiology pathways regarding new genes involved in the development of pathologies, the intestinal microbiota and its relationship with the development of inflammatory bowel disease. In addition, they will be able to delve into the latest diagnostic techniques and new biological treatments.

Professionals have an excellent opportunity to take a program in a 100% online and flexible format. You only need an electronic device with internet connection to access the syllabus hosted on the virtual platform. This University Expert is an ideal option for those seeking to update their knowledge through a quality university degree.

This Postgraduate Diploma in Surgery, Treatments and New Research Avenues in Inflammatory Bowel Diseases contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of clinical cases presented by experts in Digestive Medicine
- 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
- Latest information on Surgery, Treatments and New Research Avenues in Inflammatory Bowel Diseases
- \* Practical exercises where the self-assessment process can be carried out to improve learning
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- 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 lead you to delve into the most effective strategies in the introduction, maintenance and discontinuation of biological treatments"



With this degree you will get an update on the approach to the patient in situations of pregnancy or lactation and with inflammatory disease in the digestive tract"

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 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.

TECH Technological University uses the Relearning method with professional will be able to reduce the long hours of study and memorization.

This program will allow you to deepen in the latest scientific information on Surgery, Treatments and New Research Pathways in Inflammatory Digestive Diseases.







## tech 10 | Objectives



## **General Objectives**

- Update the knowledge of the origin, as well as the current scientific state of diagnosis and treatment of inflammatory bowel disease
- Manage nutritional and psychological aspects of the disease
- Manage different situations of this disease throughout life (childhood, senescence, pregnancy, lactation, controlled disease or outbreaks)



In just 6 months you will be up to date with new avenues of research on the main inflammatory digestive diseases"







## **Specific Objectives**

### Module 1. Inflammatory Bowel Disease Surgery

- Delve into the current indications according to clinical guidelines for surgical treatment in patients with Inflammatory Bowel Disease
- Specialize in the different surgical techniques available
- Be aware of the complications that may occur, as well as the medical management of recurrence prevention in previously operated patients
- Manage surgical indications in special situations, mainly perianal pathology
- Point out innovations in surgical approach techniques in patients with Inflammatory Bowel Disease

#### Module 2. Inflammatory Bowel Disease Treatment

- Manage non-biologic systemic treatment in the different phases of Inflammatory Bowel Disease
- Master the different biologic drug options available in inflammatory bowel disease
- Optimize treatment according to available clinical guidelines
- Know management of medical treatment of patients in special situations (lactation, pregnancy, extraintestinal manifestations, etc.)

## Module 3. New Research Avenues in Inflammatory Bowel Disease

- 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 in new endoscopic techniques, as well as artificial intelligence prototypes that may be useful for use in patients with Inflammatory Bowel Disease

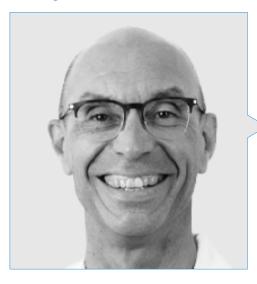






## tech 14 | Course Management

## Management



## Dr. Meneu Díaz, Juan Carlos

- Head of the General and Digestive System Surgery Department at the Ruber Juan Bravo Hospital Complex
- Principal Investigator of the Applied Medical Research Group in Networking
- Co-director of the Oncocir Medical Research Chair
- Attending physician and head of section at the Hospital 12 de Octubre
- \* Attending Physician at the Ramón y Cajal Hospital
- Professor of Surgery at the European University of Madrid
- Doctor of Medicine and Surgery, from the Complutense University of Madrid
- Catedrático de Cirugía de la Universidad Europea de Madrid

## **Professors**

## Dr. Giovanni Giordano, Pietro

- Specialist in General Surgery, Robotic Surgery and Digestive System at the Ruber Juan Bravo Hospital Complex
- \* Specialist in General Surgery and Digestive System at Quirón South Hospital in Alcorcón
- Degree in Medicine from the University of Cagliari
- Specialization in General and Digestive Surgery at the Ramón y Cajal University Hospital
- Expert in Hepatic Surgery and Transplantation
- Specialization in Hepatobiliopancreatic Surgery and Transplantation bases

### Dr. Taboada Mostajo, Néstor Orlando

- Specialist in General and Digestive Surgery at 12 de Octubre Hospital in Madrid
- Specialist in General and Digestive System Surgery at the Ruber Juan Bravo Hospital Complex
- \* Medical Degree from Universidad San Francisco Xavier de Chuquisaca







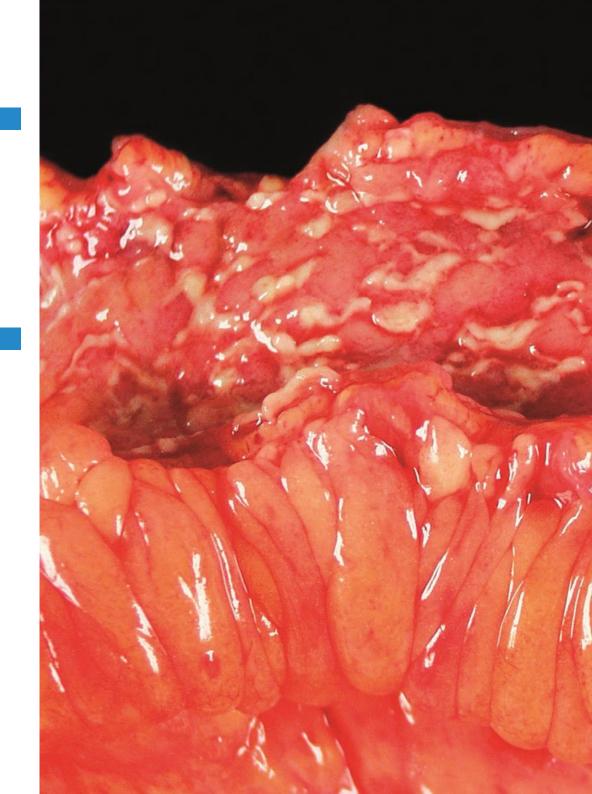
## tech 18 | Structure and Content

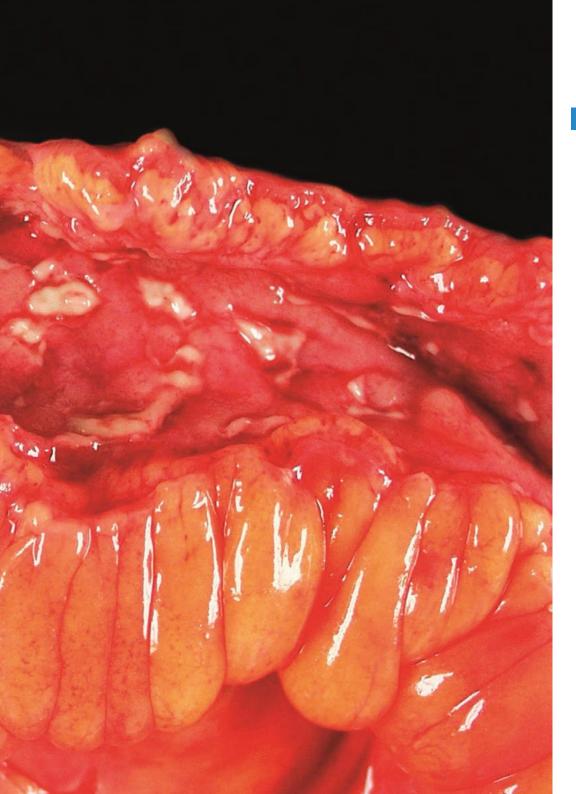
## Module 1. Inflammatory Bowel Disease Surgery

- 1.1. Indications for Surgical Treatment in Ulcerative Colitis
- 1.2. Indications for Surgical Treatment in Crohn's Disease
- 1.3. Indications for Surgical Treatment in Perianal Pathology
- 1.4. Surgical Techniques in Inflammatory Bowel Disease
- 1.5. Reservoir Pathology
- 1.6. Stomata Types and Management
- 1.7. Medical Treatment After Surgery in Inflammatory Bowel Disease
- 1.8. Complications of Surgical Treatment in Inflammatory Bowel Disease
- 1.9. Robotic Surgery in Inflammatory Bowel Disease
- 1.10. Single Port Surgery in Inflammatory Bowel Disease

## Module 2. Inflammatory Bowel Disease Treatment

- 2.1. Aminosalicylates
- 2.2. Systemic and Topical Corticosteroids
- 2.3. Immunomodulators and Immunosuppressants
- 2.4. Biological Treatments: Anti-TNF
- 2.5. Biological Therapies: Other Therapeutic Targets
- 2.6. Immunogenicity of Biological Treatments
- 2.7. Optimization of Treatment in Inflammatory Bowel Disease
- 2.8. Strategies in the Introduction, Maintenance and Discontinuation of Biologic Treatments
- 2.9. Other treatments
  - 2.9.1. Antibiotics
  - 2.9.2. Supplements
  - 2.9.3. Probiotics and Prebiotics
  - 2.9.4. Miscellaneous
- 2.10. Treatment in Special Situations
  - 2.10.1. Pregnancy
  - 2.10.2. Nursing
  - 2.10.3. Extraintestinal Manifestations





## Structure and Content | 19 tech

## Module 3. New Research Avenues in Inflammatory Bowel Disease

- 3.1. Etiopathogenesis: New Genes Involved
- 3.2. Predisposing Pathways to Inflammatory Mechanisms
- 3.3. Role of the Microbiota and the Microbiome in the Development of Inflammatory Bowel Disease
- 3.4. Fecal Transplantation in Inflammatory Bowel Disease
- 3.5. Inflammatory Bowel Disease Nutrigenomics
- 3.6. New Biological Treatments in Inflammatory Bowel Disease
- 3.7. Stem Cells and Inflammatory Bowel Disease
- 3.8. Apheresis Techniques in Inflammatory Bowel Disease
- 3.9. Precision Medicine. Systems Biology
- 3.10. Artificial Intelligence in Inflammatory Bowel Disease



This university degree brings you closer to the use of artificial intelligence in the diagnosis of inflammatory bowel diseases"





## 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.



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:

- 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.



## 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.

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.









## tech 30 | Certificate

This Postgraduate Diploma in Surgery, Treatments and New Research Avenues in Inflammatory Bowel Diseases 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 Diploma** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Diploma Surgery, Treatments and New Research Avenues in Inflammatory Bowel Diseases

Official No of Hours: 450 h.



<sup>\*</sup>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.

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## Postgraduate Diploma

Surgery, Treatments and New Research Avenues in Inflammatory Bowel Diseases

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- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

