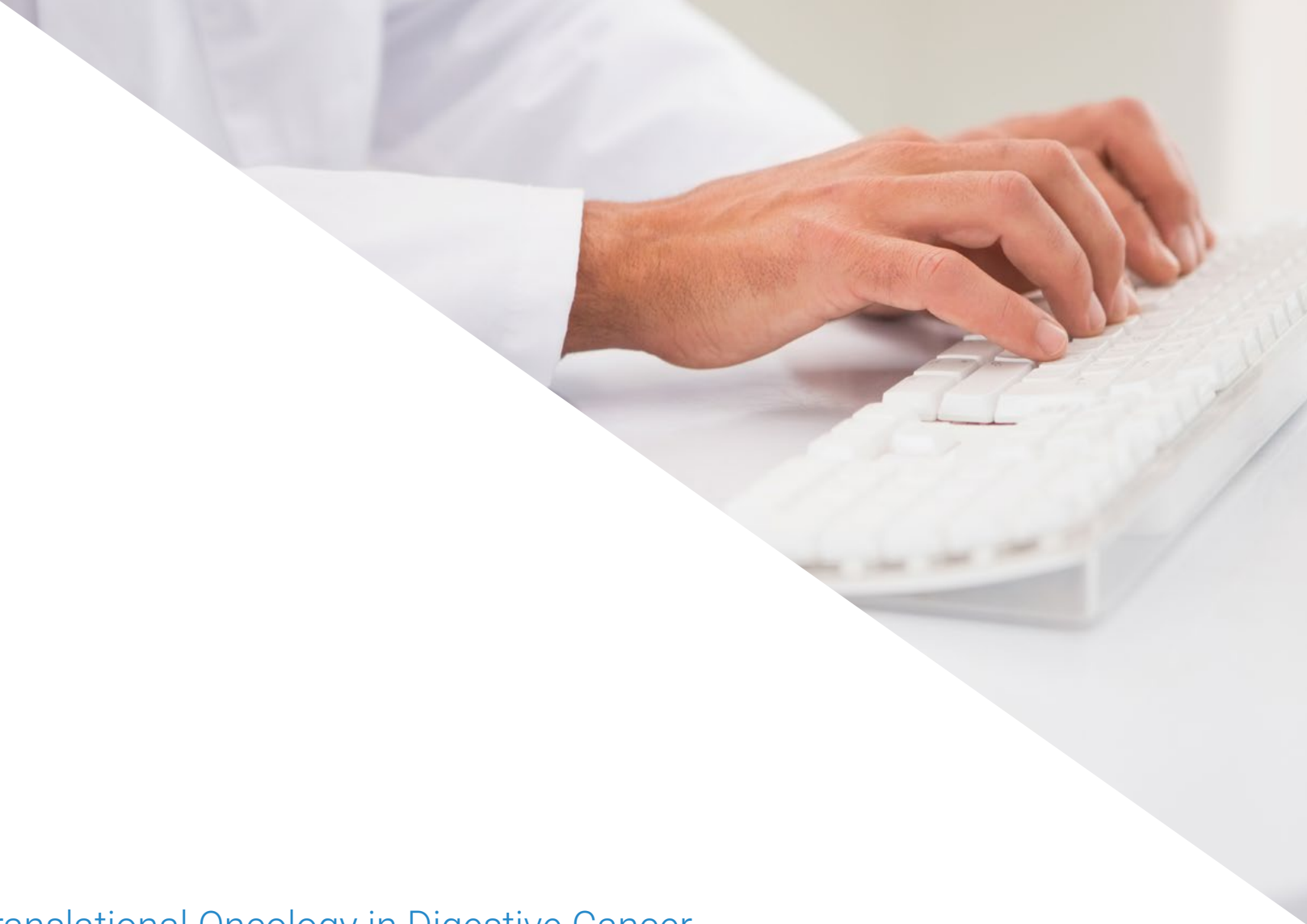


# Postgraduate Certificate

## Molecular Biology and Translational Oncology in Digestive Cancer



## Postgraduate Certificate

### Molecular Biology and Translational Oncology in Digestive Cancer

Course Modality: **Online**

Duration: **2 months**

Certificate: **TECH Technological University**

**9 ECTS Credits**

Teaching Hours: **225 hours**

Website: [www.techtute.com/medicine/postgraduate-certificate/molecular-biology-translational-oncology-digestive-cancer](http://www.techtute.com/medicine/postgraduate-certificate/molecular-biology-translational-oncology-digestive-cancer)

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01

# Introduction

Digestive tumors represent an important cause of morbidity and mortality in the population of both sexes. It is estimated that approximately 220,000 new cases of cancer are detected in Spain each year, 25% of which are digestive tumors. Their incidence has varied over the years.



“

*Improve your knowledge in molecular biology and translational oncology in digestive cancer through this program, where you will find the best didactic material with real clinical cases. Learn here about the latest advances in the specialty to be able to perform a quality medical practice”*

Whereas a few years ago the survival of metastatic patients was around six months, it has now extended to at least 24 months, as a result of the fact that in recent years there have been many important advances in early detection, diagnosis and treatment procedures, so that at the same time, we are faced with increasing complexity in the management of these tumors.

The continuous improvement and sophistication of imaging methods, the refinement of some surgical techniques, the increased hierarchization of certain pathological findings, the inclusion of molecular biology in clinical practice, the incorporation of personalized medicine, changes in many classical therapeutic approaches, technological advances for the administration of radiotherapy, the incorporation of immunotherapy and new combined modalities, new complications and sequelae of new treatments, are some of the factors that make the care of patients with digestive tumors an increasingly complex activity.



*Update your knowledge through this Postgraduate Certificate in Molecular Biology and Translational Oncology in Digestive Cancer”*

This **Postgraduate Certificate in Molecular Biology and Translational Oncology in Digestive Cancer** contains the most complete and up-to-date scientific program on the market. The most important features of the course are:

- ♦ Clinical cases presented by experts in the different specialties. The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ New developments in the diagnosis and treatment of digestive tumors
- ♦ Algorithm-based interactive learning system for decision-making in the presented clinical situations
- ♦ With special emphasis on evidence-based medicine and research methodologies in the diagnosis and treatment of tumors of the upper gastrointestinal tract
- ♦ All of this will be complemented by 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

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*This course may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge of Molecular Biology and Translational Oncology in Digestive Cancer, you will obtain a certificate from TECH Technological University"*

Forming part of the teaching staff is a group of professionals in the world of digestive oncology who bring to this training their work experience, as well as a group of renowned specialists, recognised by esteemed scientific communities.

The 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 immersive training program to train in real situations.

Problem-Based Learning underpins this program design, and the doctor must use it to try and solve the different professional practice situations that arise throughout the course. This will be done with the help of an innovative interactive video system created by renowned experts in the field of diagnosis and treatment of digestive tumors and with extensive teaching experience.

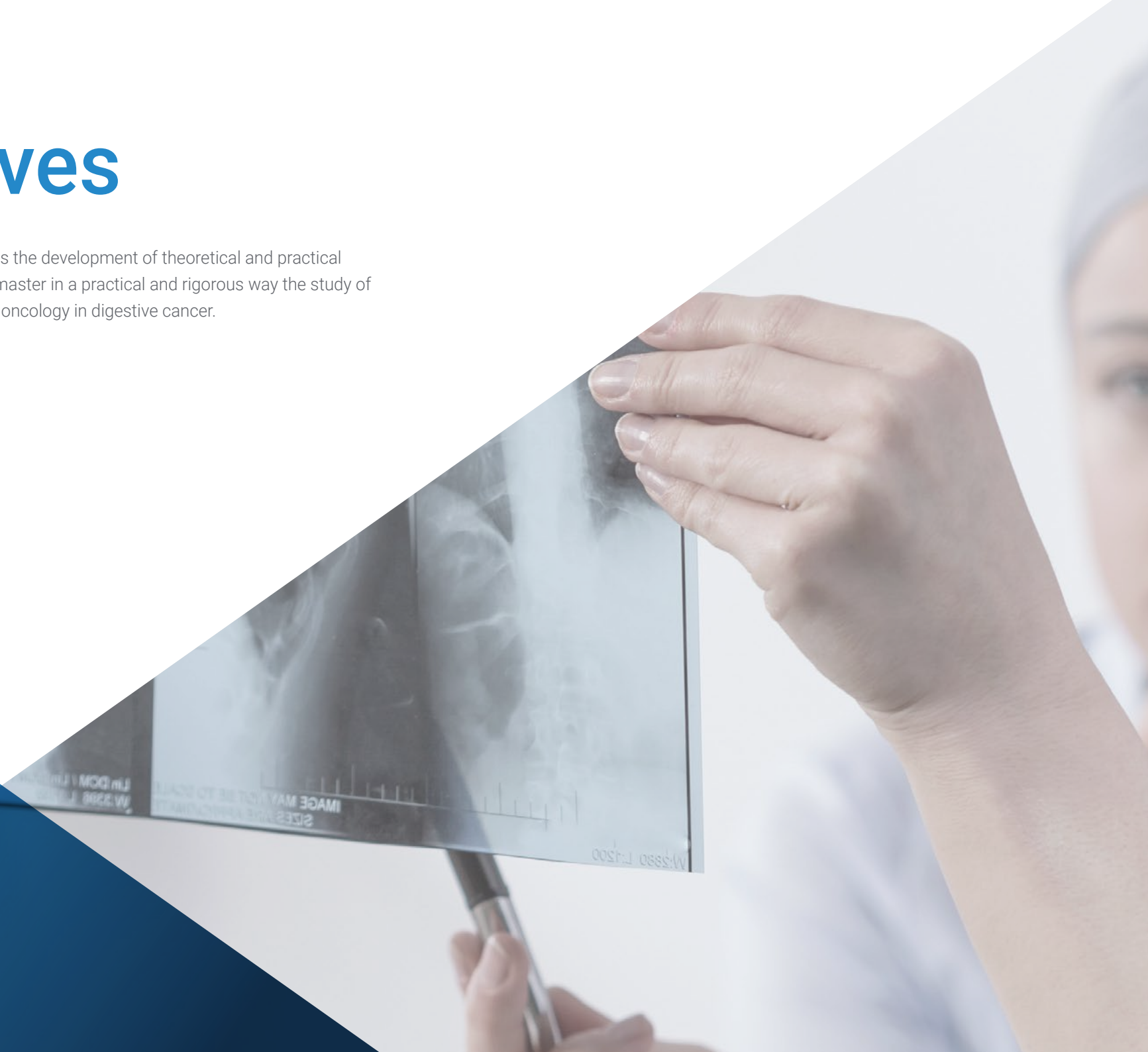
*Increase your decision-making confidence by updating your knowledge through this program.*

*Take the opportunity to learn about the latest advances in Molecular Biology and Translational Oncology in Digestive Cancer and improve your patient care.*



# 02 Objectives

The main objective of the program is the development of theoretical and practical learning, so that the physician can master in a practical and rigorous way the study of molecular biology and translational oncology in digestive cancer.







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*This refresher program will generate a sense of confidence in medical practice, which will help you grow both personally and professionally”*



## General Objectives

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- Create a global and updated vision of the exposed topics that will allow the student to acquire useful knowledge and at the same time, generate interest in expanding the information and discovering its application in their daily practice.
- Provide and expand knowledge on immunotherapy, as an example of a clear scientific advance in translational research, and one of the most promising lines of research in cancer treatment.
- Discuss the current landscape of stomach cancer immunotherapy, combinations in clinical development, strategies for dose selection and trial design, clinical pharmacology and regulatory considerations.





## Specific Objectives

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- Update knowledge in the molecular biology of cancer, especially in relation to the concept of genetic heterogeneity, reprogramming of the microenvironment in digestive tumors, role of the immune response in cancer control, circulating biomarkers and tissue molecular markers.

*Update your knowledge through this Postgraduate Certificate in Molecular Biology and Translational Oncology in Digestive Cancer.*

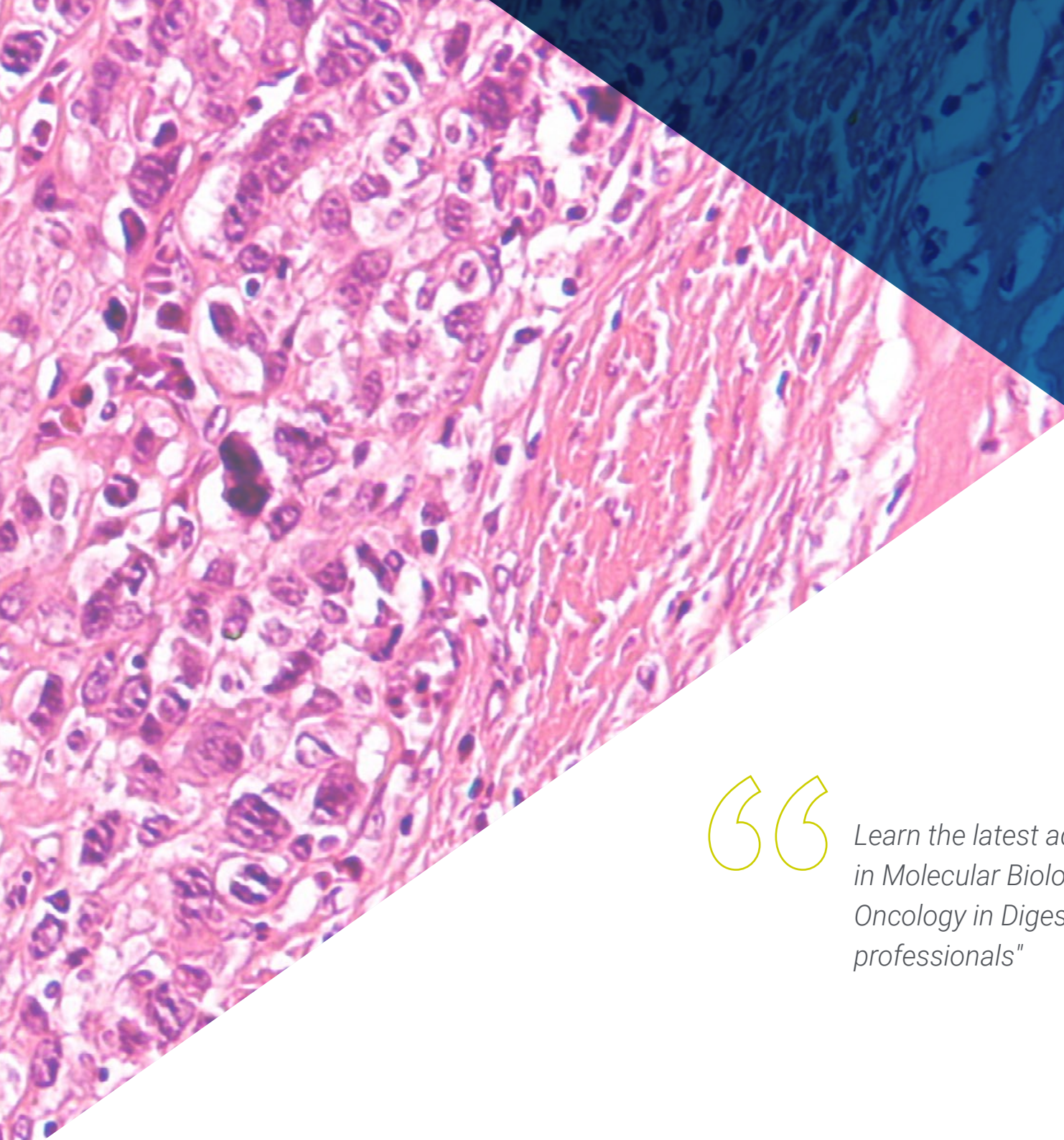
04

# Course Management

This program includes highly regarded health professionals in the field of digestive oncology in its teaching staff, who bring the experience of their work to this training.

In addition, renowned specialists, members of prestigious national and international scientific communities, are involved in designing and preparing the program.





“

*Learn the latest advances in procedures  
in Molecular Biology and Translational  
Oncology in Digestive Cancer from leading  
professionals"*

## International Guest Director

Internationally renowned for his innovative approach in **Oncological Medicine**, Dr. Michel Ducreaux is a prestigious **physician** highly specialized in the management of multiple **digestive conditions** such as Pancreatic Carcinoma. His philosophy is based on offering **personalized treatments** according to the specific requirements of each patient, which has contributed to optimize the quality of life of numerous individuals.

With more than 20 years of professional experience in the healthcare field, he has been part of recognized global reference institutions such as the **Gustave Roussy Hospital** in France. In this same line, he has assumed several strategic roles, among which stand out the **Direction of the Digestive Oncology Service** or the **Management of Medical Affairs**. Among his main achievements, he has been a pioneer in the application of new therapies for **Metastatic Colorectal Cancer**. Thanks to this, he has been able to successfully manage complex cancer cases and has considerably improved the survival rates of individuals.

He has also balanced this work with his role as **President of the European Organization for Research and Treatment of Cancer in Brussels**. In this way, he has contributed to the establishment of new clinical guidelines on therapies for chronic pathologies, focusing on practices based on the latest scientific evidence. In turn, he has published more than **500 research articles** in indexed journals on subjects such as the analysis of **Neuroendocrine Tumors**, the use of new **less invasive therapies** or cutting-edge strategies for the approach to **Hepatocellular Carcinoma**.

Committed to clinical innovation, he has participated as a **speaker** in several **scientific congresses** worldwide. Thanks to this, he has shared the findings of his studies and has promoted the exchange of knowledge among specialists. In this way, he has contributed to the updating of therapeutic practices to maximize the quality of patient care.



## Dr. Ducreaux, Michel

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- ♦ Head of Gastrointestinal Oncology and Tumor Board at Gustave Roussy, Villejuif, France
- ♦ President of the European Organization for Research and Treatment of Cancer in Brussels
- ♦ Specialist in Medical Affairs
- ♦ Research Scientist
- ♦ Editor of the European Journal of Cancer
- ♦ President of the World Gastrointestinal Cancer Congress in Barcelona
- ♦ PhD in Medicine from University of Paris-Sud
- ♦ PhD in Biological Sciences, University of Burgundy
- ♦ Member of: Ethics Committee of the National League Against Cancer, European Society of Medical Oncology, American Society of Clinical Oncology, French Cancer Society and French Society of Gastroenterology

“

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

## Management



### Dr. Oruezábal Moreno, Mauro Javier

- ♦ Head of the medical Oncology Service at La Paz University Hospital since 2017
- ♦ Research Fellow at University of Southampton (2016-present)
- ♦ Master's Degree in Bioinformatics and biostatistics UOC-UB (2016-ongoing)
- ♦ Master's Degree in bioinformatic analysis by the Pablo de Olavide University (2015-2016)
- ♦ Doctor of Medicine from the Complutense University of Madrid. Outstanding Cum Laude Qualification (2002)
- ♦ Member of the Spanish Society of Medical Oncology (SEOM) and the Spanish Group of Digestive Tumors (TTD)
- ♦ Specialist (MIR) in Medical Oncology, University Hospital San Carlos of Madrid (2000)
- ♦ Degree in Medicine and Surgery, University of Navarra (1995)



### Dr. Esteban López-Jamar, José Miguel

- ♦ Head of the Endoscopy Unit at the San Carlos Clinical University Hospital of Madrid
- ♦ PhD in Medicine and Surgery, from the Complutense University of Madrid with Outstanding Award
- ♦ Training at the AMC in Amsterdam, the Paoli Calmettes Institute in Marseille and the Horst-Schmidt-Kliniken in Wiesbaden (Germany)
- ♦ Member of the SEPD, ACAD, SEED, ESGE
- ♦ Honorary Member of the Equatorian Society of Gastroenterology
- ♦ Professor and member of the Scientific Advisory Committee of the University Specialization Course in Endoscopic Ultrasonography of the UOC.
- ♦ Specialist (MIR) in the Digestive System, San Carlos University Hospital of Madrid





### Dr. Loinaz Seguro, Carmelo

- ♦ Chief of Section of General and Digestive System Surgery, Doce de Octubre University Hospital, Madrid
- ♦ Degree in Medicine and Surgery, University of Navarra (1985)
- ♦ Specialist in General and Digestive System Surgery, Doce de Octubre University Hospital
- ♦ Doctor in Medicine and Surgery, Complutense University of Madrid, qualification outstanding cum laude (1991)
- ♦ Associate Professor of Health Sciences. Accredited as Full Professor by ANECA (2009)
- ♦ Member of the Spanish Association of Surgeons, Spanish Society of Parenteral and Enteral Nutrition, American College of Surgeons, Spanish Society of Transplantation, Spanish Society of Liver Transplantation, European Society of Organ Transplantation, The Transplantation Society (and IRTA section, Intestinal Rehabilitation and Transplant Association), IASGO (International Society of Surgeons, Gastroenterologists and Oncologists), ISDE (International Society of Diseases of the Esophagus)
- ♦ Head of General Surgery Unit, Alcorcón University Hospital (2004-2008)
- ♦ Master's Degree in Medical Management and Clinical Management, UNED and Escuela de Sanidad-Instituto Carlos III
- ♦ Coordinator of the Humanitarian Collaboration Group of the AEC
- ♦ Committee of Health Cooperation at the Department of Surgery of the UCM

## Professors

### Dr. Abradelo, Manuel

- ♦ HBP Surgery and Transplant Department
- ♦ Queen Elizabeth Hospital
- ♦ Birmingham, United Kingdom

### Dr. Alonso Casado, Oscar

- ♦ General Surgery Department
- ♦ M.D. Anderson Hospital, Madrid

### Dr. Astudillo González, Aurora

- ♦ Anatomic Pathology Service
- ♦ Associate Professor at the University of Oviedo linked to the Central University Hospital of Asturias
- ♦ Scientific Director of the Principality of Asturias Biobank

**Dr. Bertomeu García, Agustín**

- ♦ Esophago-Gastric Surgery Section
- ♦ General Surgery Department
- ♦ University Hospital of Getafe, Madrid

**Dr. Boan García, Jose Francisco**

- ♦ Head of the Nuclear Medicine Department and Molecular Imaging
- ♦ Ruber International Hospital, Madrid

**Dr. Cacho Lavin, Diego**

- ♦ Medical Oncology Service
- ♦ Marqués de Valdecilla University Hospital

**Dr. Concha Lopez, Ángel**

- ♦ Head of Anatomic - Pathology Department and director of the Biobanc
- ♦ A Coruña University Hospital Complex

**Dr. Custodio Carretero, Ana**

- ♦ Gastrointestinal and Neuroendocrine Tumors Unit
- ♦ Medical Oncology Department
- ♦ La Paz University Hospital, IdiPaz

**Dr. Del Valle, Emilio**

- ♦ Head of the General Surgery Services
- ♦ Gregorio Marañón University Hospital, Madrid

**Dr. Díaz Pérez, Jose Angel**

- ♦ Endocrinology and Nutrition Service
- ♦ San Carlos Clinical University Hospital, Madrid

**Dr. Díaz Gavela, Ana A.**

- ♦ Esophago-Gastric Surgery Section
- ♦ Radiation Oncology Service
- ♦ Quironsalud Hospital of Madrid

**Dr. Figueroa, Angélica**

- ♦ Institute of Biomedical Research A Coruña (INIBIC)
- ♦ Research Group Leader, Epithelial Plasticity and Metastasis

**Dr. García-Sesma, Alvaro**

- ♦ HBP Surgery and Abdominal Organ Transplantation Unit
- ♦ General Surgery Department
- ♦ Doce de Octubre University Hospital, Madrid

**Dr. González Bayón, Luis**

- ♦ General Surgery Department
- ♦ Gregorio Marañón University Hospital, Madrid

**Dr. Gonzalez-Haba Ruiz, Mariano**

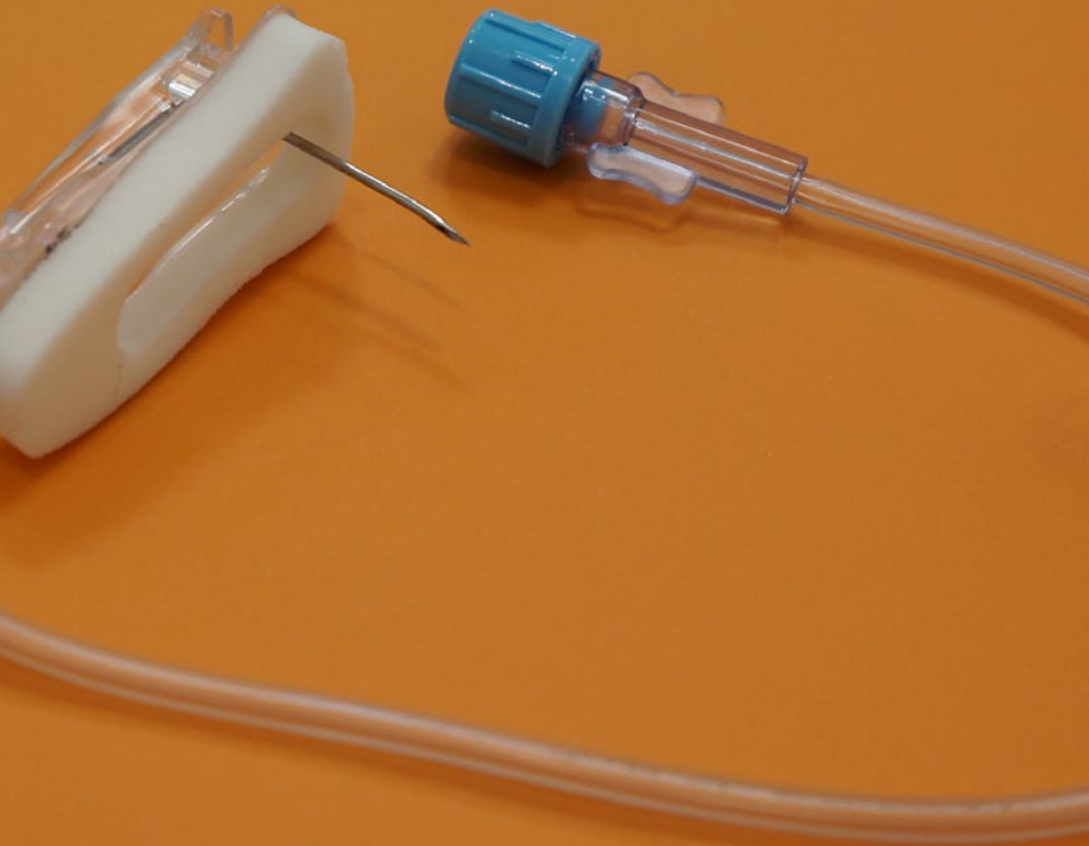
- ♦ Gastroenterology Department
- ♦ Puerta de Hierro Hospital, Madrid

**Dr. López López, Rafael**

- ♦ Head of the Medical Oncology Department
- ♦ Santiago de Compostela University Hospital Complex
- ♦ Translational Medical Oncology Group Health Research Institute

**Dr. López Guerrero, José Antonio**

- ♦ Medical Oncology Department
- ♦ Valencian Institute of Oncology



**Dr. Martínez Isla, Alberto**

- ♦ Northwick Park-St. Marks Hospitals
- ♦ London, United Kingdom

**Dr. Martinez Trufero, Javier**

- ♦ Medical Oncology Department
- ♦ Miguel Servet University Hospital

**Dr. Paramio Gonzalez, Jesús**

- ♦ CIEMAT Molecular Oncology Unit
- ♦ 12 de Octubre Research Institute of Madrid

**Dr. Rueda Fernández, Daniel**

- ♦ Research Unit
- ♦ 12 de Octubre University Hospital of Madrid

**Dr. Sabater Ortí, Luis**

- ♦ General Surgery Department
- ♦ Clinical University Hospital of Valencia

**Dr. Velastegui Ordoñez, Alejandro**

- ♦ Medical Oncology Service
- ♦ Rey Juan Carlos University Hospital of Madrid

**Dr. Vega, Vicente**

- ♦ General Surgery Department
- ♦ University Hospital of Puerto Real, Cádiz

**Dr. Valladares Ayerbes, Manuel**

- ♦ UGC Medical Oncology.
- ♦ Virgen del Rocío University Hospital IBIS – Seville

05

# Structure and Content

The structure of the contents has been designed by a team of professionals who recognise the implications of preparation in daily medical praxis, aware of the relevance of current specialization to treat the patient in molecular biology and translational oncology in digestive cancer and are committed to quality teaching using new educational technologies.



“

*This Postgraduate Certificate in Molecular Biology and Translational Oncology in Digestive Cancer contains the most complete and up-to-date scientific program on the market”*

## Module 1. Molecular Biology and Translational Oncology

- 1.1. Molecular Mechanisms of Cancer.
- 1.2. Tumor Immunology: Basis of Cancer Immunotherapy.
- 1.3. Role of the Biobank in Clinical Research.
- 1.4. Understanding the New Technology: Next Generation Sequence (NGS) in Clinical Practice.
- 1.5. Liquid Biopsies: Fashion or Future?
- 1.6. Update on Molecular Markers for Treatment Decisions in Gastrointestinal Malignancies.
- 1.7. Do Molecular and Immunological Classifications Have Clinical Implications in 2017?





“

*A unique, key, and decisive  
experience to boost your professional  
development”*

06

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning.***

This teaching system is used 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 Re-learning, 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

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can 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 potential 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 professional medical 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 grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on 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.



## Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

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.

*The physician 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.*



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

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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



In this program you will have access to the best educational material, prepared with you 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### Interactive Summaries

We present 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, international guides. in our virtual library you will have access to everything you need to complete your training.





#### 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 your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



#### Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



# 06 Certificate

The **Postgraduate Certificate in Molecular Biology and Translational Oncology in Digestive Cancer** guarantees, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by **TECH Technological University**.





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*Successfully complete this Training and Receive your Postgraduate Certificate without travel or cumbersome procedures"*

This **Postgraduate Certificate in Molecular Biology and Translational Oncology in Digestive Cancer** contains the most complete and up-to-date scientific program on the market.

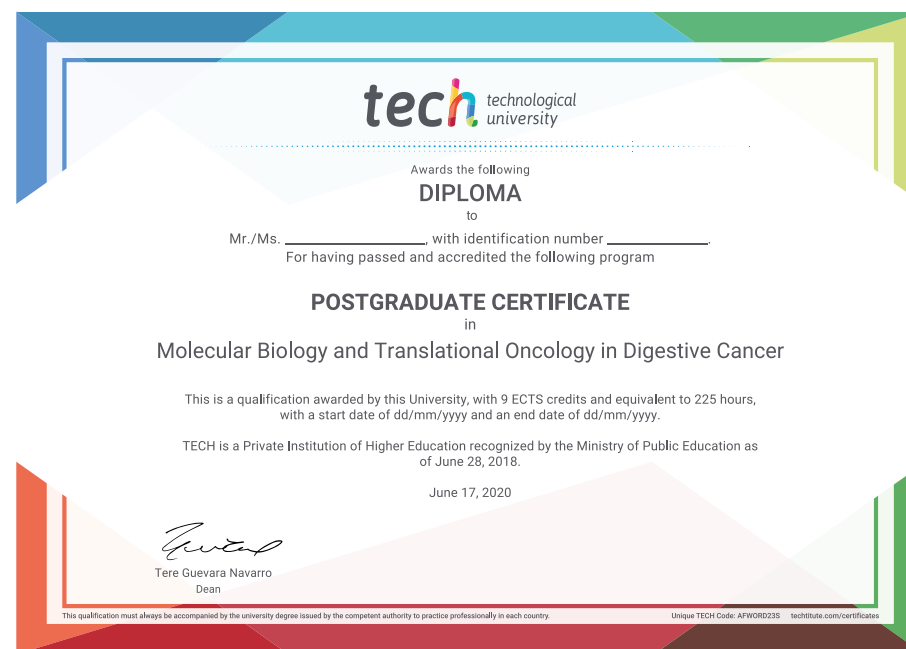
After the student has passed the evaluations, they will receive by mail with acknowledgment of receipt their corresponding Postgraduate Certificate issued by **TECH Technological University**.

The certificate issued by **TECH Technological University** will specify the qualification obtained through the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Molecular Biology and Translational Oncology in Digestive Cancer**

ECTS: **9**

Official Number of Hours: **225**



health future confidence people education information tutors guarantee accreditation teaching institutions technology learning community commitment personalized service innovation knowledge pres online development virtual classro



## Postgraduate Certificate

### Molecular Biology and Translational Oncology in Digestive Cancer

Course Modality: **Online**

Duration: **2 months**

Certificate: **TECH Technological University**

**9 ECTS Credits**

Teaching Hours: **225 hours**

# Postgraduate Certificate

## Molecular Biology and Translational Oncology in Digestive Cancer

