

Postgraduate Certificate

Agnostic Tumors





Postgraduate Certificate Agnostic Tumors

- » 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/agnostic-tumors

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

The evolution of molecular diagnostic techniques has made it possible to detect new genomic alterations, which are susceptible to causing a tumor phenotype, as well as to have more precision in the detection of those already known. In this program, TECH introduces the main diagnostic treatments aimed at different pathologies, in order for the student to expand their knowledge and become more precise in their profession, specializing in a specific area that continually demands professionals, given the uniqueness of the pathology. All in all, the proposed curriculum is unique, with a high-quality syllabus that will guide the professional towards excellence in the sector.



ment

“

Agnostic treatments allow us to be more effective in therapies for rare tumors, so it is important to have specialized professionals in this field. Study this program and advance your career"

Currently, the diagnostic accuracy achieved with next-generation sequencing (NGS) techniques has made possible a paradigm shift in cancer treatment, opening the door to the choice of treatment based on a particular biomolecular alteration, rather than the type and location of the tumor, a concept known as tumor-agnostic treatment.

The main objective of precision medicine in oncology is the detection of the molecular alterations that act as the main causes of cancer. One of the most important biomarkers detected is the NTRK fusion gene, which appears in a wide variety of tumor types in both adult and pediatric patients. In this program we review the clinical and molecular aspects of these tumors, whose prognosis varies radically when recognized.

Another classic agnostic treatment is that of tumors with microsatellite instability, which benefit, also in an approved manner, from the use of immunotherapy independent of the anatomical location of the tumor. The diagnosis of microsatellite instability can be molecular but also immunohistochemical, and therefore widely available, so providing students with knowledge of the possibilities of diagnosis, treatment and genetic counseling of patients with this alteration is fundamental and will have an important impact on the survival of their patients.

In this program, the experts, all of them referents in each area of knowledge, will develop aspects related to the context of this spectrum of pathologies, will present the clinical and molecular vision of the same, will show their diagnostic and therapeutic approaches, and will explain complementary aspects such as their research and institutional environment or the global reality of the patients who suffer from them. In this way, a global vision is offered, as well as a specific one, of this type of pathologies, with the objective of preparing you for professional success.

Students will be able to complete the program at their own pace, without being subject to fixed schedules or the travel involved in classroom teaching, so they can combine it with the rest of their daily obligations.

This **Postgraduate Certificate in Agnostic Tumors** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ◆ Case studies presented by experts in oncology
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- ◆ News on tumors of the gynecologic and genitourinary area
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ Special emphasis on innovative methodologies in the approach to this type of tumors
- ◆ 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



The specialization of oncology professionals improves the treatment of patients, so it is essential that they continue their learning throughout their working life"

“ You will gain knowledge about one of the most important biomarkers detected is the NTRK fusion gene, which appears in a wide variety of tumor types in both adult and pediatric patients”

It includes, in its teaching staff, professionals belonging to the field of oncology, who contribute to this program with the experience of their work, as well as renowned specialists from reference societies and prestigious universities.

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 knowledge programmed to learn in real situations.

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

You will delve into the new paradigm in cancer treatment, opening the door to the choice of treatment based on a particular biomolecular alteration.

You will know how to successfully manage the approach to tumors with microsatellite instability.



02 Objectives

The design of this Postgraduate Certificate in Agnostic Tumors will allow the student to delve into the field of medicine that is in constant research due to its rarity. This way, you will update your professional profile and boost your career in a field of study that demands specialists. There, the program has been developed by a team of experts with contents that will enable the future graduate to reach the proposed objectives. However, you will be fully empowered to deal with the latest advances and the newest treatments currently being applied. For this reason, TECH has established a series of general and specific objectives for the satisfaction of future graduates, as follows:





“

Achieve your goal: delve into the development of a number of agnostic treatments in various pathologies”



General Objectives

- ◆ Acquire concepts and knowledge regarding the epidemiology, clinical, diagnosis and treatment of infrequent tumors, agnostic diagnoses and cancers of unknown origin
- ◆ Know how to apply the diagnostic algorithms and evaluate the prognosis of this pathology
- ◆ Be able to integrate knowledge and face the complexity of formulating clinical and diagnostic judgments based on the available clinical information
- ◆ Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the area of study
- ◆ Know how to establish complex therapeutic plans in the context of the pathology in question Have a deeper knowledge of specific treatment networks, reference centers, clinical trials
- ◆ Incorporate new technologies into daily practice, knowing their advances, limitations and future potential
- ◆ Acquire knowledge about molecular biology tools for the study of these tumors
- ◆ Have thorough knowledge and use Tumor Registries
- ◆ Know and use the face-to-face or virtual Molecular Committees
- ◆ Understand fundamental aspects of biobank operation
- ◆ Specialize in interprofessional relationship tools for the treatment of orphan, agnostic and cancer of unknown origin and to access expert networks in the different pathology groups
- ◆ Know how to apply knowledge to solve clinical and research problems in the area of rare pathology
- ◆ Know how to communicate conclusions, knowledge, and supporting arguments to specialized and non-specialized audiences in a clear and unambiguous way
- ◆ Acquire the learning skills to enable further studying in a largely self directed or autonomous manner
- ◆ Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context
- ◆ Understand the social responsibility due to rare diseases



Specific Objectives

- ◆ Become familiar with the concept of agnostic diagnosis
- ◆ Delve into the new paradigm in cancer treatment, opening the door to the choice of treatment based on a particular biomolecular alteration, over and above the type and location of the tumor, a concept known as tumor agnostic treatment.
- ◆ Gain knowledge about one of the most important biomarkers detected is the NTRK fusion gene, which appears in a wide variety of tumor types in both adult and pediatric patients
- ◆ Provide the student with the necessary judgment to use molecular tools efficiently and safely to detect patients carrying their mutations
- ◆ Manage the approach to tumors with microsatellite instability
- ◆ Delve into the development of numerous agnostic treatments in various pathologies

“

Take the opportunity and take the step to get up to date on the latest news in Agnostic Tumors”

03

Course Management

Due to TECH's commitment to offering an elite education for all, it counts on renowned professionals so that the student acquires a solid knowledge in the medical specialty of this program. Therefore, this program has a highly qualified team, reference in oncology, which will offer the best tools for the student in the development of their skills during the program. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner. This way, the student has the guarantees required to specialize in a field in which specialists are continually needed, catapulting them to professional success and also contributing to the development of their research faculties.



“

*Learn from the best, specialize
in medical excellence with TECH”*

Management



Dr. Beato, Carmen

- ◆ Medical Oncologist at University Hospital Virgen Macarena. Unit of Urological Tumors, Infrequent and of Unknown Origin
- ◆ Expert in Immuno-Oncology
- ◆ Master's Degree in Palliative Care
- ◆ Expert in Clinical Trials
- ◆ Member of the Spanish Group on Orphan and Infrequent Tumors (GETHI)
- ◆ Secretary Spanish Group for Cancer of Unknown Origin (GECOD)

Professors

Dr. García-Donas Jiménez, Jesús

- ◆ Oncologist Urological, Gynecological and Dermatological Tumors Unit.
- ◆ Director of the Translational Oncology Laboratory
- ◆ Expert in Immuno-Oncology
- ◆ Clara Campal Comprehensive Oncology Center
- ◆ Treasurer of the Spanish Group of Orphan and Infrequent Tumors (GETHI)

Dr. Fernández Pérez, Isaura

- ◆ Oncologist Breast, Gynecologic, Gynecologic, Cancer of Unknown Origin and Central Nervous System Unit. University Hospital Complex in Vigo-Hospital Álvaro Cunqueiro
- ◆ Member of the Spanish Group for Cancer of Unknown Origin (GECOD)



04

Structure and Content

The syllabus of this program has been designed based on the requirements of medicine applied to the existence of Agnostic Tumors, a specialization that is scarce in the market of the educational offer due to its rarity and that is of vital importance in healthcare. Therefore, it is essential that medical professionals delve deeper into the subject, contributing to the investigation of the conditions that cause these cases and propose treatments that minimize them. Therefore, the content of the program has been structured in such a way that it includes all the necessary information for the student on their way to medical excellence in this field.





*The best curriculum for the best student.
TECH wants to see you succeed"*

Module 1. Agnostic Tumors

- 1.1. Concept of Agnostic Treatment: New Entities in Oncology
 - 1.1.1. Concepts
 - 1.1.2. Agency-Approved Agnostic Treatments
 - 1.1.3. Agnostic Treatments under Development
- 1.2. Neurotrophic Tyrosine Receptor Kinase (NTRK) Family
 - 1.2.1. NTRK Structure and Function
 - 1.2.2. Algorithm for Identifying Patients with TRK Fusions
 - 1.2.3. Clinical Spectrum of NTRK-Fused Tumors
- 1.3. Treatment with NTRK Inhibitors
 - 1.3.1. General Aspects
 - 1.3.2. Indications
 - 1.3.3. Pivotal Test Results
 - 1.3.4. Results in Clinical Practice
 - 1.3.5. Toxicity of NTRK Inhibitors
- 1.4. Tumors with Microsatellite Instability
 - 1.4.1. Significance of Microsatellite Instability
 - 1.4.2. Algorithm for Identifying Patients with Microsatellite Instability
 - 1.4.3. Clinical Spectrum of Unstable Tumors
- 1.5. Treatment of Tumors with Microsatellite Instability
 - 1.5.1. General Aspects
 - 1.5.2. Indications
 - 1.5.3. Pivotal Test Results
 - 1.5.4. Results in Clinical Practice
- 1.6. Towards Agnostic Treatment of Thoracic and Head Neck Tumors
 - 1.6.1. General Aspects
 - 1.6.2. Indications and Results
 - 1.6.3. Toxicity





- 1.7. Towards Agnostic Treatment in Digestive Tumors
 - 1.7.1. General Aspects
 - 1.7.2. Indications and Results
 - 1.7.3. Toxicity
- 1.8. Towards Agnostic Treatment in Urologic and Gynecologic Tumors
 - 1.8.1. General Aspects
 - 1.8.2. Indications and Results
 - 1.8.3. Toxicity
- 1.9. Towards Agnostic Treatment in CNS Tumors
 - 1.9.1. General Aspects
 - 1.9.2. Indications and Results
 - 1.9.3. Toxicity
- 1.10. The Development of Agnostic Treatment in Other Tumors
 - 1.10.1. General Aspects
 - 1.10.2. Indications and Results
 - 1.10.3. Toxicity

“

Specialize with TECH and get the boost you needed in your academic career”

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"

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:

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

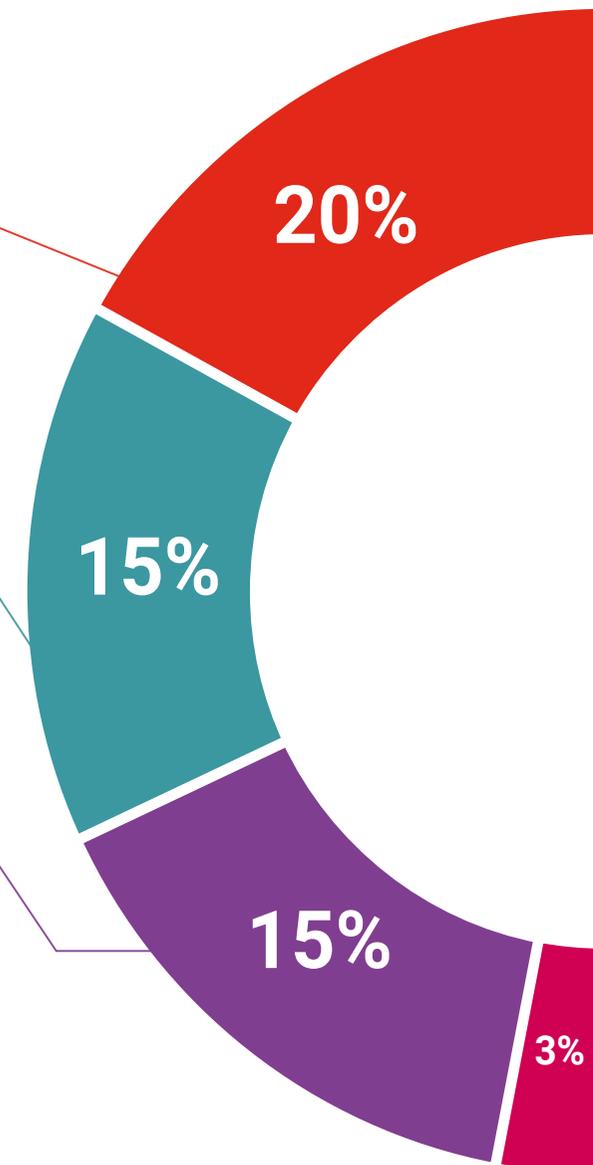
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

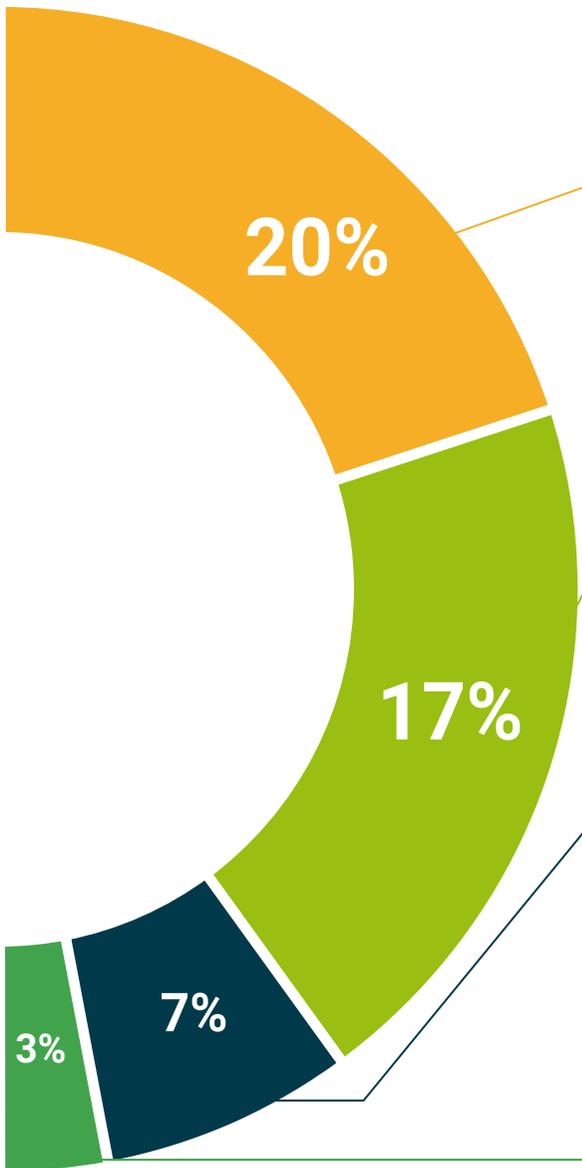
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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 Agnostic Tumors guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Global University.





“

*Successfully complete this program
and receive your university degree
without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Agnostic Tumors** 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 Agnostic Tumors**

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.

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



Postgraduate Certificate Agnostic Tumors

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

Postgraduate Certificate Agnostic Tumors