

Postgraduate Certificate Gammagraphic Studies and PET Tracers



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Postgraduate Certificate Gammagraphic Studies and PET Tracers

- » 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/gammagraphic-studies-pet-tracers

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01

Introduction

Of the many techniques offered by Nuclear Medicine for diagnosis and treatment, gammagraphy and positron emission tomography radiotracers are some of the most important. These procedures make it possible to observe the functioning of the organism and to obtain precise diagnoses for different pathologies. For this reason, it is an area in great expansion and is increasingly in demand in Nuclear Medicine services. Thus, this qualification is essential for all those physicians who want to specialize in this area, being able to progress professionally thanks to the new knowledge learned in the program.





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*Specialize in Gammagraphic Studies
and PET Tracers and become a great
expert in Nuclear Medicine"*

Nuclear Medicine has more and more techniques that facilitate the diagnosis and application of treatments. Two of the techniques with the greatest present and future in this field are Gammagraphy and Positron Emission Tomography Radiotracers. This Postgraduate Certificate prepares students to specialize in these methods so that they can apply them in their professional careers.

Thus, throughout this qualification, students will learn to analyze and observe pathologies related to infections and inflammations such as osteomyelitis, endocarditis, inflammatory vasculitis, encephalitis, sarcoidosis and Covid-19. In this way, they will receive a complete learning process on this type of procedures and their practical applications.

Physicians who complete this program will be in a position to access the best Nuclear Medicine services in the country thanks to their new skills, and will be able to update their knowledge, making them continue to be at the forefront of the discipline.

In addition, this Postgraduate Certificate is taught through an innovative 100% online methodology that adapts to the personal and professional circumstances of each student, making it the perfect education for those doctors who wish to update their knowledge, but do not have enough time to enroll in another type of more rigid qualification.

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

- ♦ The development of case studies presented by experts in Nuclear Medicine.
- ♦ 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.
- ♦ 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



This Postgraduate Certificate will give you access to the best Nuclear Medicine services in the country"

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This is the opportunity you were looking for to update your knowledge about Nuclear Medicine. Don't hesitate and enroll"

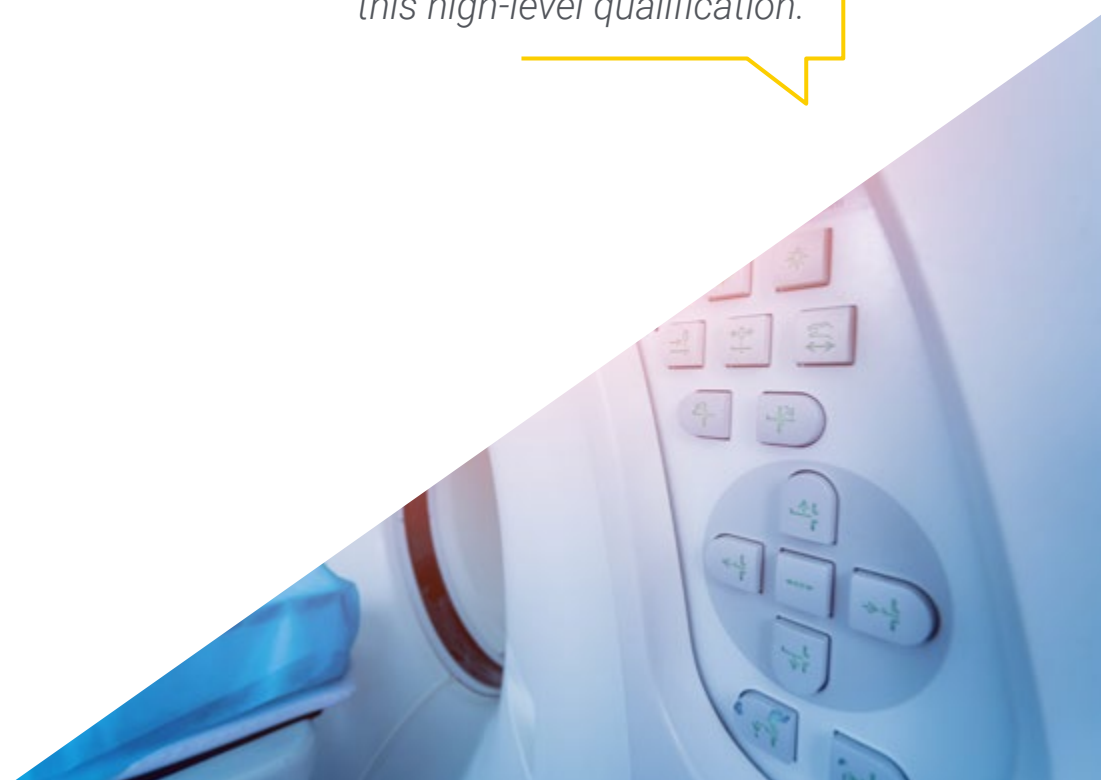
The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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 training programmed to train 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. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Diagnose with great precision all types of pathologies thanks to what you will learn in this Postgraduate Certificate.

Make your prestige grow thanks to this high-level qualification.



02 Objectives

The main objective of this Postgraduate Certificate in Gammagraphic Studies and PET Tracers is to make its students become great experts in these diagnostic techniques, so that at the end of the qualification they reach a professional improvement and can aspire to manage a prestigious Nuclear Medicine service. To this end, it offers them high-level contents and an innovative learning method with which they will learn all the contents of the program in a deep and simple way.





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You are ambitious and TECH helps you achieve all your professional goals. What are you waiting for? Enroll now”



General Objectives

- Update the specialist in Nuclear Medicine
- Perform and interpret functional tests in an integrated and sequential manner
- Achieve diagnostic guidance for patients
- Assist in deciding the best therapeutic strategy, including radiometabolic therapy, for each patient
- Apply clinical and biochemical criteria for the diagnosis of infections and inflammations
- Learn about the new therapies of Nuclear Medicine





Specific Objectives

- ◆ Delve into the application of molecular and morphofunctional imaging techniques in the field of Nuclear Medicine in the diagnosis, assessment of the extent and response to treatment of infectious/inflammatory pathology in the different organs and systems
- ◆ Delve into the techniques applied in the specific clinical context
- ◆ Accurate diagnosis with the least consumption of resources and radiation for the patient

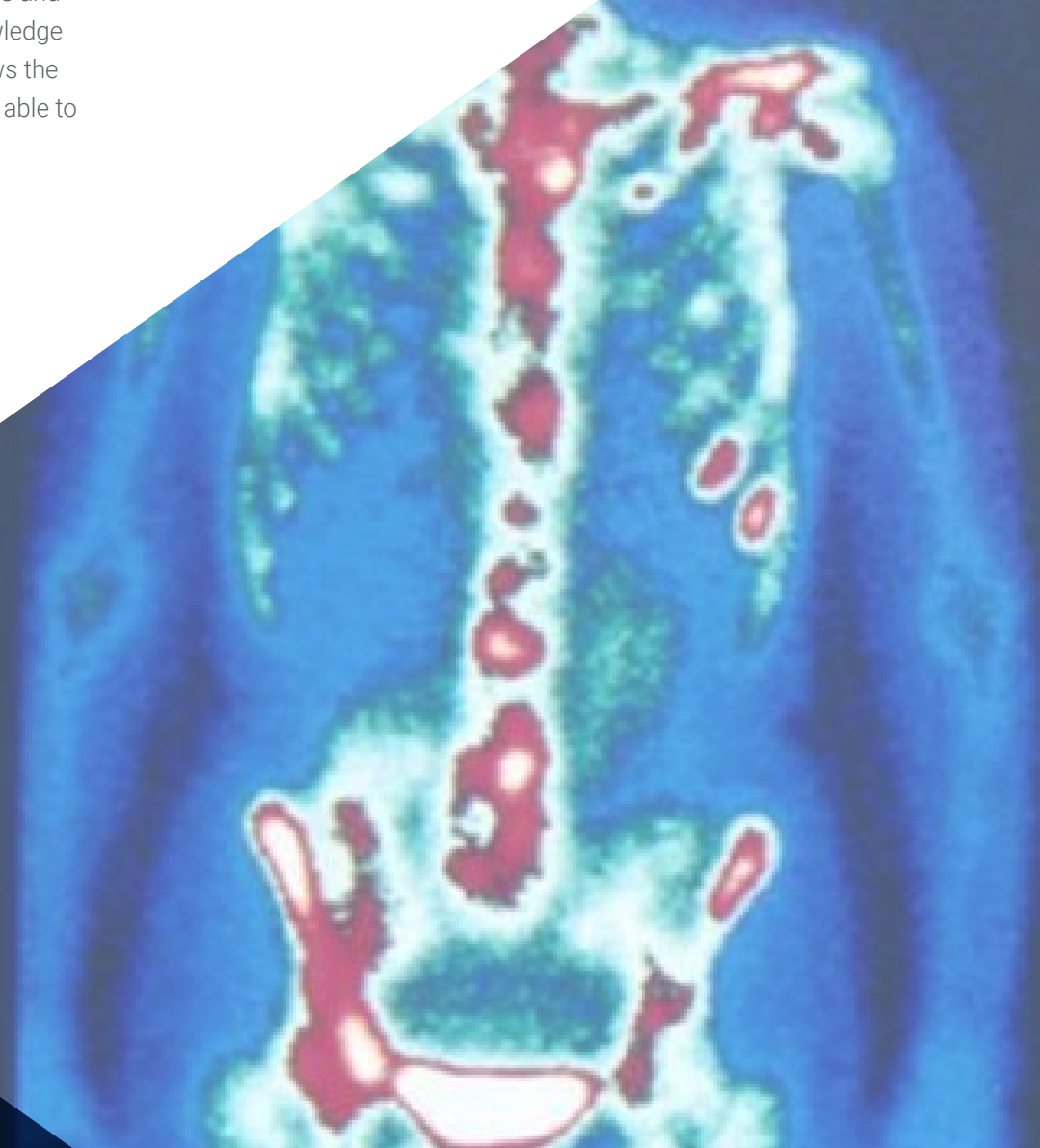
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The breakthrough you were looking for in your career is in this Postgraduate Certificate”

03

Course Management

The best teachers deliver this Postgraduate Certificate in Gammagraphic Studies and PET Tracers, so that students can obtain the most up-to-date and in-depth knowledge on the subject. Thus, this faculty is in direct contact with the discipline and knows the latest developments in Gammagraphy and PET Tracers, so that students will be able to apply everything they have learned directly in their professional fields.





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*High level faculty teaches
you all about Gammagraphic
Studies and PET Tracers”*

International Guest Director

Dr. Stefano Fanti's prominent career has been entirely devoted to **Nuclear Medicine**. For almost 3 decades he has been professionally linked to the **PET Unit** at the **Polyclinic S. Orsola**. His exhaustive management as **Medical Director** of that hospital service allowed an exponential growth of the same, both its facilities and equipment. As a result, in recent years the institution has performed more than **12,000 radiodiagnostic examinations**, making it one of the **most active** in Europe.

Based on these results, the expert was selected to **reorganize** the **functions** of all the metropolitan centers with Nuclear Medicine tools in the region of Bologna, Italy. After this intensive professional task, he has held the position of **Referent of the Maggiore Hospital Division**. Also, still in charge of the PET Unit, Dr. Fanti has coordinated several grant applications for this center, receiving important funding from national institutions such as the Italian **Ministry of Universities** and the **Regional Health Agency**, Ministry of Universities.

On the other hand, this specialist has participated in many research projects on the clinical application of **PET** and **PET/CT technologies** in **Oncology**. In particular, he has investigated the approach to Lymphoma and **Prostate Cancer**. In turn, he has integrated the teams of many clinical trials with BCP requirements. In addition, he personally leads experimental analyses in the field of new PET tracers, including C-Choline, F-DOPA and Ga-DOTA-NOC, among others.

Also, Dr. Fanti is a collaborator of the **International Atomic Energy Organization (IAEA)**, participating in initiatives such as the consensus for the introduction of **radiopharmaceuticals for clinical use** and other advisory missions. He is also the author of more than 600 articles published in international journals and is a reviewer for The Lancet Oncology, The American Journal of Cancer, BMC Cancer, among others.



Dr. Fanti, Stefano

- ♦ Director of the Specialized School of Nuclear Medicine of the University of Bologna, Italy
- ♦ Director of the Division of Nuclear Medicine and of the PET Unit of Polyclinic S. Orsola
- ♦ Referent of the Division of Nuclear Medicine, Maggiore Hospital
- ♦ Associate Editor of Clinical and Translational Imaging, the European Journal of Nuclear Medicine and the Spanish Journal of Nuclear Medicine
- ♦ Reviewer for The Lancet Oncology, The American Journal of Cancer, BMC Cancer, European Urology, The European Journal of Hematology, Clinical Cancer Research, and other international journals
- ♦ Advisor to the International Atomic Energy Organization (IAEA)
- ♦ Member of: European Association of Nuclear Medicine

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

Management



Dr. Mitjavila, Mercedes

- ♦ Head of Nuclear Medicine Service Puerta de Hierro University Hospital Majadahonda, Madrid
- ♦ Project Manager of the Nuclear Medicine Unit in the Diagnostic Imaging Department of the Alcorcón Foundation University Hospital
- ♦ Head of Service of Nuclear Medicine of the Puerta de Hierro Hospital, Majadahonda. Competitive examination BOCM
- ♦ Degree in Medicine and General Surgery from the University of Alcalá de Henares
- ♦ MIR in Nuclear Medicine Specialist by the MIR System
- ♦ PhD in Medicine and General Surgery from the University of Alcalá de Henares
- ♦ Interim Physician of the Nuclear Medicine Service of the Ramón y Cajal Hospital
- ♦ Interim Physician in the Nuclear Medicine Unit at Getafe University Hospital



Professors

Dr. Rodríguez Alfonso, Begoña

- ◆ Elective Physician Puerta de Hierro University Hospital
- ◆ Elective Physician La Paz University Hospital
- ◆ Elective Physician Ciudad Real General Hospital
- ◆ Degree in Medicine and Surgery Complutense Complutense University of Madrid
- ◆ Official Doctoral Program in Medicine and Surgery Autonomous University of Madrid

04

Structure and Content

This Postgraduate Certificate in Gammagraphic Studies and PET Tracers is structured in 1 specialized module through which students will be able to learn everything about the application of these techniques to observe pathologies such as endocarditis, inflammatory vasculitis, postoperative fever, polycystic fibrosis, or Covid-19, a disease for which these methods have been very useful for an effective and precise monitoring.



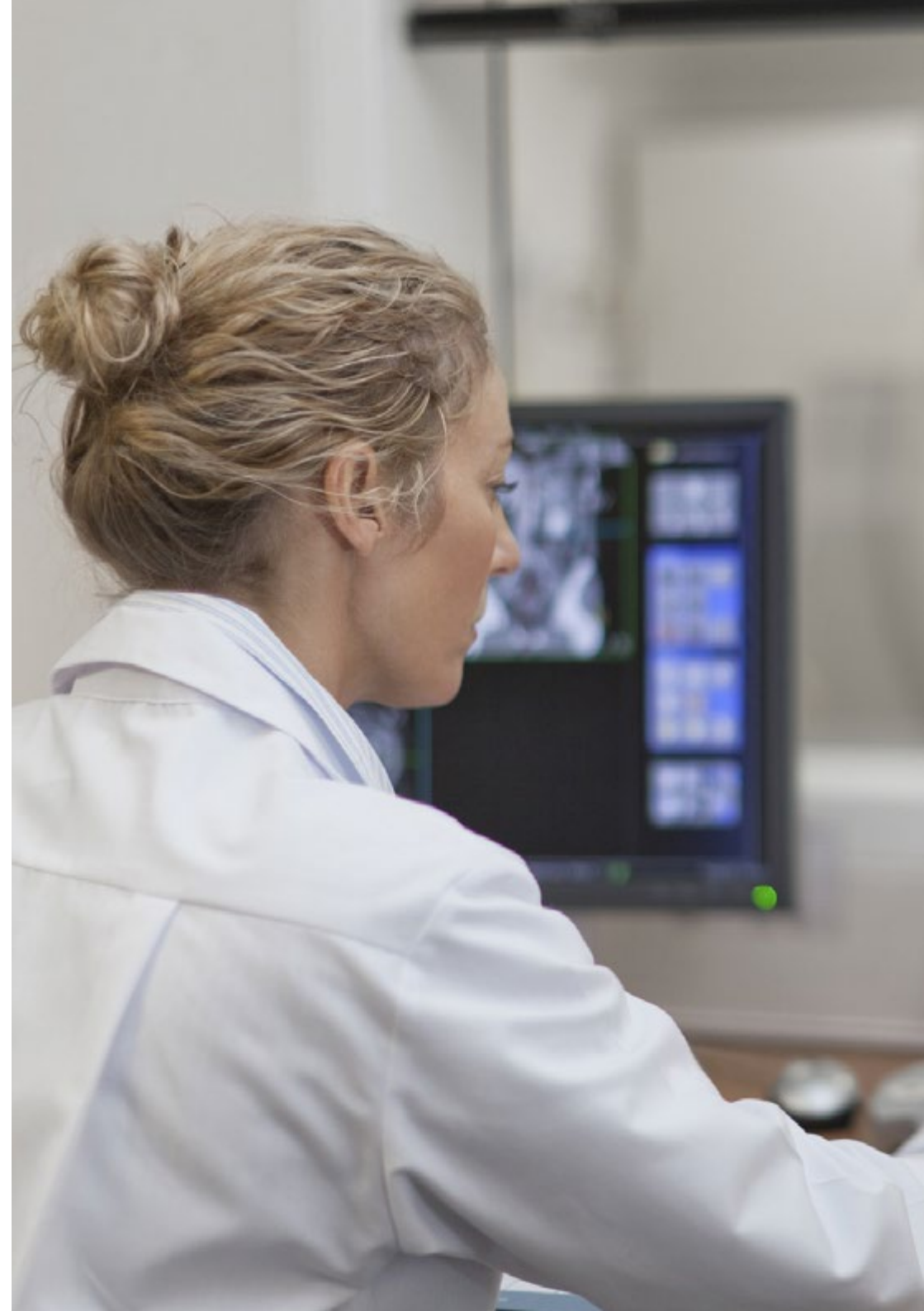


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With these contents you will be able to make very accurate diagnoses of various pathologies”

Module 1. Infection/Inflammation: Gammagraphic Studies and PET Tracers

- 1.1. Osteoarticular
 - 1.1.1. Osteomyelitis: Previously Healthy Bone, Diabetic Patient, Spine Surgery
 - 1.1.2. Prosthesis: Septic vs. Aseptic Mobilization
- 1.2. Cardiac
 - 1.2.1. Endocarditis: Native Valve, Prosthetic Valve
 - 1.2.2. Myocarditis: Infectious vs. Inflammatory
 - 1.2.3. Intracardiac Devices
- 1.3. Vascular
 - 1.3.1. Inflammatory Vasculitis
 - 1.3.2. Prosthetic Graft Infection
- 1.4. Encephalitis: PET-FDG Study
 - 1.4.1. Paraneoplastic
 - 1.4.2. Infectious: Patterns and Differential Diagnosis
- 1.5. Fever of Unknown Origin
 - 1.5.1. Immunosuppressed Patients
 - 1.5.2. Postoperative Fever and Recurrent Sepsis
- 1.6. Systemic Disease
 - 1.6.1. Sarcoidosis: Diagnosis, Extent and Response to Treatment
 - 1.6.2. Ig4-related Disease
- 1.7. Other Locations
 - 1.7.1. Hepatorenal Polycystic Kidney Disease: Localization of the Infectious Focus
 - 1.7.2. Hepatobiliary: Post-surgical Patient
- 1.8. Covid-19
 - 1.8.1. Nuclear Medicine Studies in Acute Phase: Pulmonary Inflammation, Pulmonary Thromboembolism, Oncology Patient and Covid-19
 - 1.8.2. Utility of Nuclear Medicine in Post-covid Pathology: Pulmonary, Systemic
 - 1.8.3. Organizational Changes in a Pandemic Situation





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*Specialize in this field of
Nuclear Medicine and
progress professionally”*

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. 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.

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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 Harvard 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 multimedia content presentation training Exclusive 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, 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 your goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



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 Gammagraphic Studies and PET Tracers guarantees you, in addition to the most rigorous and up-to-date training, access to a certificate issued by TECH Global University.



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Successfully complete this training and receive your university certificate without travel or laborious paperwork”

This program will allow you to obtain your **Postgraduate Certificate in Gammagraphic Studies and PET Tracers** 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 Gammagraphic Studies and PET Tracers**

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.

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guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
development language
virtual classroom



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