



# Postgraduate Certificate Genomic and Integrative Medicine

Course Modality: **Online** Duration: **3 months**.

Endorsed by: TECH Technological University

**8 ECTS Credits** 

Teaching Hours: 200 hours.

Website: www.techtitute.com/medicine/postgraduate-certificate/genomic-integrative-medicine

# Index

06

Certificate

p. 28





# tech 06 | Introduction

Advanced Integrative Medicine is a field of Health Sciences that is in full development in the most advanced countries, with a large percentage of the population using complementary or alternative forms of treatment (CAM) at least once in their lifetime: 48% in Australia, 70% in Canada, 42% in the USA, 38% in Belgium, and 75% in France.

The momentum of this approach is motivating its inclusion in public health services in countries such as the United Kingdom, Germany, Belgium, the Netherlands and the Nordic countries. For example, 90% of pain management services in the United Kingdom and 70% in Germany include acupuncture among the treatments they provide.

In 1998, the European Union completed a COST (European Cooperation in the field of Scientific and Technical Research) project on non-conventional medicine. With the participation of several governments, including Spain, the aim was to demonstrate the possibilities, limitations and significance of alternative medicine, establishing a common scientific framework, harmonizing legislation and helping to control healthcare costs. The CAMBRELLA project, a pan-European research network on natural therapies, was launched in January 2010 and has been funded with more than 1.5 million euros through the EU's Seventh Framework Program. The working groups that make up CAMBRELLA focus on terminology, legal framework, patient needs, the role of natural therapy treatments in healthcare systems and research methodology.

The World Health Organization expressed an explicit desire in this regard to incorporate Traditional Medicine at the global level in its 2014-2023 Strategy.

With the most complete and up to date scientific program on the market. The most important features of the program include:

- Development of more than 75 clinical cases presented by experts in Advanced Integrative Medicine and Health.
- Graphic, schematic and eminently practical contents with scientific and assistive information on those disciplines that are essential for professional practice.
- Diagnostic and therapeutic novelties on evaluation, diagnosis and intervention in Advanced Integrative Medicine and Health.
- Practical exercises where the self-evaluation process can be carried out to improve learning.
- Clinical iconography and diagnostic imaging tests.
- Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- Incidence on evidence-based medicine and research methodologies in Advanced Integrative Medicine and Health.
- 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.



Genomic Medicine and Integrative
Medicine are two of the medical areas most focused on Personalized Medicine, one of the medicine of the future".



The Postgraduate Certificate in Genomic Medicine and Integrative Medicine will provide you with the theoretical and practical knowledge necessary for the practice of this scientific modality".

Its teaching staff is made up of prestigious and renowned Spanish professionals, including experts in the field of medicine and advanced integrative health, with a long history of care, teaching and research, who have worked in various hospitals throughout the country, developing a professional and teaching experience that they deliver in an extraordinary way in this course.

The methodological design of this course, developed by a multidisciplinary team of e-learning experts, integrates the latest advances in educational technology. Also including the creation of numerous multimedia educational tools that allow the professional, primarily relying on the scientific method, to address the solution of real problems in their daily clinical practice, allowing them to advance in the acquisition of knowledge and the development of skills that will impact their future professional work.

This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this, the doctor will be assisted by an innovative interactive video system created by renowned experts in the field of Advanced Integrative Medicine and Health and other related disciplines with extensive teaching experience.

An extraordinary training based on experience, through the work on more than seventy real cases.

Make the most of the opportunity to learn with the best trained professionals in this field, with the support of TECH Technological University.







# tech 10 | Objectives



## **General Objectives**

- Acquire the knowledge and skills necessary to assess the suitability of each discipline in the clinical setting, allowing the provision of quality care based on scientific evidence.
- Acquire up-to-date knowledge of Health Sciences Professionals in the various fields of Integrative Medicine.
- Foster work strategies based on the integrative approach and multimodal rehabilitation, as a reference model in the achievement of excellence in care.
- Promote the acquisition of technical skills and abilities through an effective multimedia system.
- Encourage professional stimulation through continuing education and research.

A course backed by the prestige of TECH Technological University, one of the most prestigious universities in Spain.







### **Specific Objectives**

- Analyze the efficacy of Genomic Medicine in clinical practice, pattern recognition and evaluation of metabolic networks.
- Interpret literature related to the module.
- Describe the importance of isolating patterns of meaning within complex signals and the complexity of analyzing large data sets.
- Develop customized, clinically meaningful omics-based solutions with a focus on lifestyle and wellness-centered solutions.
- Review the legal context of the application of Integrative Medicine, how to assess risk and mitigate cases of malpractice.
- Understand common ethical issues that arise in current clinical practice.
- Understand what can be disclosed, to whom, for what reason, and what is needed for disclosure.
- Reflect on the need for academic and professional organization according to the regulatory framework of some European countries.
- Discuss the right of the individual as a patient to free access to Integrative Medicine.
- Define and differentiate the categories of drugs approved in the Spanish public health system and in other countries.
- Review access to complementary medicine therapies in hospital settings.
- Address the need to integrate Integrative Medicine within the Public Health System.
- Reflect the reduction in economic expenditure and improvement in quality of life related to the introduction of IM.
- Identify resources in the community and the referral network for patients requiring specialized care.

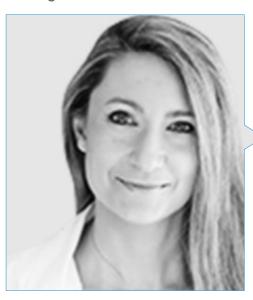
- Review the epidemiology, pathophysiology and mechanisms underlying mood disorders and mental illness.
- Analyze the relationship between the peripheral and central nervous system with the digestive tract and the immune system.
- Study the evidence for integrative medicine treatment of neurological and psychiatric diseases.
- Establish strategies for an integrative approach to Mental Health.
- Review cases related to neurological and psychiatric illnesses and demonstrate competency in the development of comprehensive care plans.
- Study the relationship of stress to mindfulness, mindfulness and self-care.
- Develop practices related to Mind-Body Techniques based on mindfulness and related techniques.
- Examine heart rate variability, autonomic tone, and self-regulatory practices for emotional care.





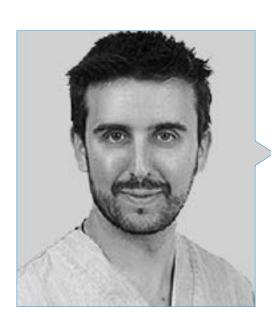
# tech 14 | Course Management

### Management



### Dr. Menassa, Alejandra

- Internal Medicine Physiciar
- President of the Spanish Society of Integrative Health and Medicine (SESMI)
- Head of the CMI Mental Health Unit.
- Psychoanalyst and Professor at Grupo Cero School of Psychoanalysis
- Member of SEMI (Spanish Society of Internal Medicine).
- Expert in ozone therapy in Internal Medicine from the University of Havana
- Master's Degree in Evaluation of bodily and psychosocial damage by the European Institute



### Rodríguez, Pedro

- Nurse
- Master's Degree in Mental Health Catholic University of Valencia
- Master's Degree in Nutrition University of the Balearic Islands
- Expert in Immunonutrition Catholic University of Valencia
- Specialist in Natural Medicine (Osteopathy, Kinesiology and Acupuncture), Faculty of Medicine, University of Murcia.
- Diploma in Acupuncture by ADEATA and FEDINE
- Director of the Therapeutic Yoga postgraduate course at the CEU Cardenal Herrera
- Director of Medintegra
- Socio Biomédica Sc.
- · Educational partner of the G-SE international team
- Head of Sanitary Area C.A.I. Alicante City Counci
- Board Member of the Spanish Association of Integrative Health and Medicine.
- Member of the Spanish Association of Community Nursing
- Member of International Association of Yoga Therapists
- Member of the Expert Team of the European TCM Foundation

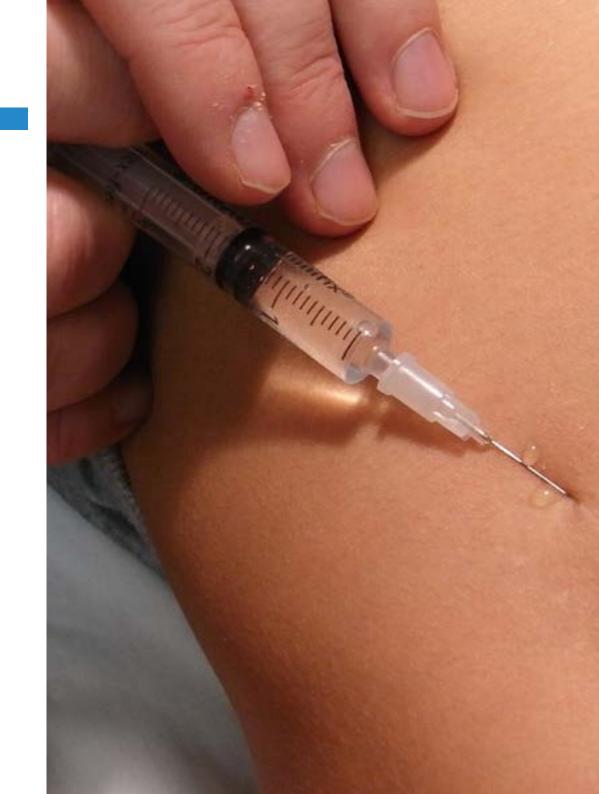




# tech 18 | Structure and Content

### Module 1. Genomic Medicine

- 1.1. Introduction to Genomic Medicine.
- 1.2. Polymorphisms. Epigenetics.
- 1.3. Nutritional Genomics.
  - 1.3.1. Nutrigenomics.
  - 1.3.2. Functional food
  - 1.3.3. Personalized Diet Therapy.
- 1.4. Pharmacogenomics.
- 1.5. Biomedicine. Biochemistry Overview.



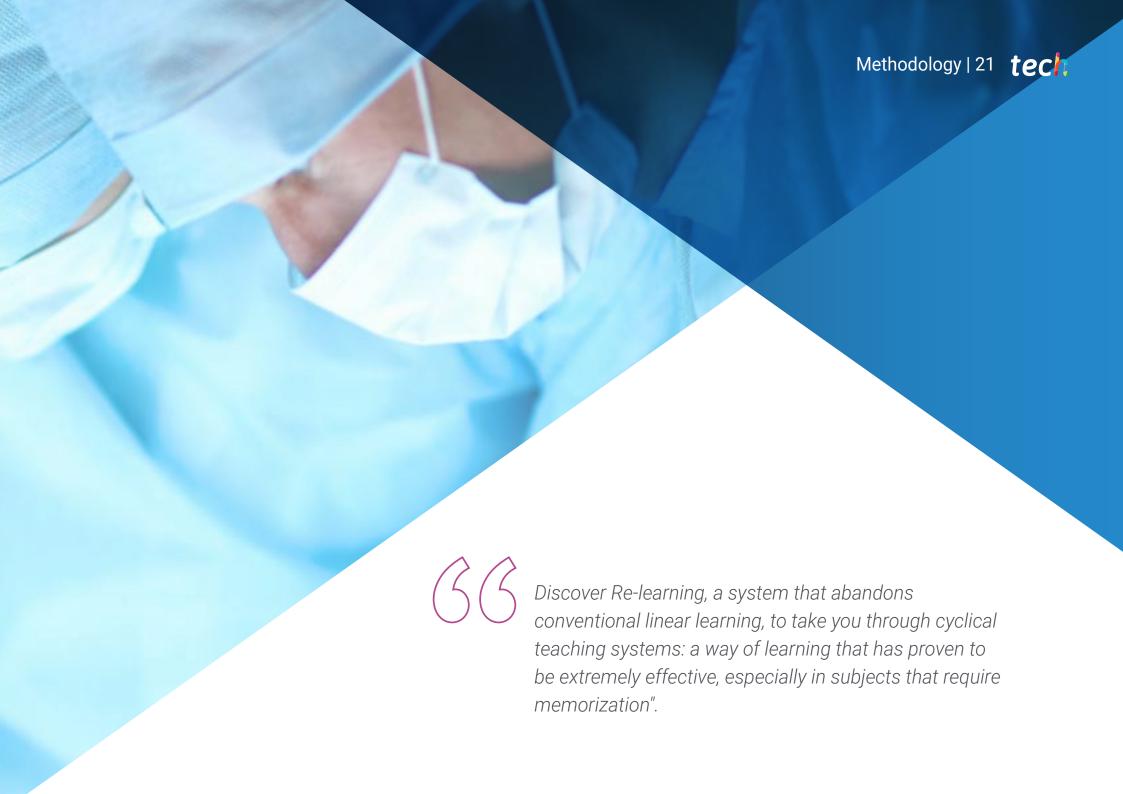




Get, in only three months, the knowledge and accreditation in genomic medicine with the endorsement of the best specialized courses in medicine of the moment"







# tech 22 | Methodology

#### 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:

- 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.





### Methodology | 25 tech

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.

# tech 26 | Methodology

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**

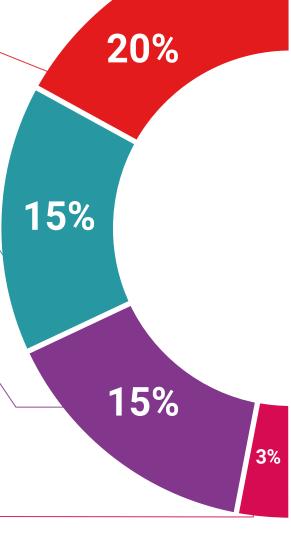
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.

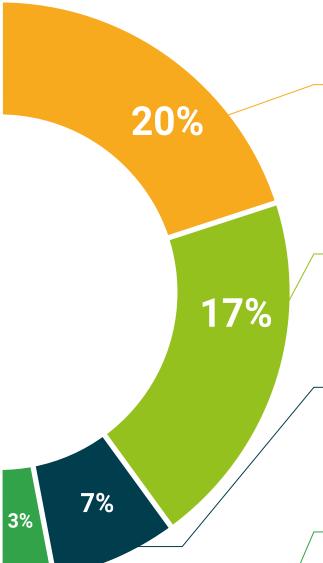
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





### **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 & Re-testing**

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.







# tech 30 | Certificate

This **Postgraduate Certificate in Genomic and Integrative Medicine** contains the most complete and up to date scientific program on the market.

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

The certificate issued by **TECH Technological University** will express the qualification obtained in the course, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: Postgraduate Certificate in Genomic and Integrative Medicine

ECTS: 8

Official Number of Hours: 200



Genomic and Integrative Medicine

This is a qualification awarded by this University, with 8 ECTS credits and equivalent to 200 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

ne 17. 2020

Guevara Navarro

his qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each c

ue TECH Code: AFWORD23S techtitute.com/certificat



# Postgraduate Certificate Genomic and Integrative Medicine

Course Modality: Online Duration: 3 months.

Endorsed by: TECH Technological University

8 ECTS Credits

Teaching Hours: 200 hours.

