



# Postgraduate Certificate

# Pediatric Respiratory Physiotherapy

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/physiotherapy/postgraduate-certificate/pediatric-respiratory-physiotherapy

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Certificate





# tech 06 | Introduction

Respiratory physiotherapy is part of physiotherapy, but focusing on the pathophysiology of the respiratory system, both medical and surgical, requiring a demanding knowledge of the respiratory system and the existing techniques for its treatment, healing and stabilization.

The disciplinary consideration of respiratory physiotherapy with a scientific-technical basis began in the late twentieth century, thanks to technological advances that allow measuring respiratory work and techniques, and is currently becoming necessary and essential in different hospital units. Therefore, it is essential that physical therapists update their knowledge in respiratory physiotherapy and acquire new techniques and tools to apply in their daily practice.

Physiotherapy is considered one of the therapeutic pillars in the management of patients with pulmonary diseases, whether obstructive or restrictive, chronic or acute.

The increase in the incidence of respiratory pathologies that we are going to see during this Postgraduate Certificate, both in children and adults, considerably affects the quality of life of the patients who suffer from them, as well as our health system, with a high social and economic cost due to hospitalization days, sick leave and early death.

The Postgraduate Certificate has a teaching staff specialized in respiratory physiotherapy, who contribute both their practical experience in their day-to-day work in private practice, as well as their lengthy experience in teaching at national and international level. In addition, it has the advantage of being a 100% online training, so the student can decide from where to study and at what time to do it, in this way, they can flexibly self-direct their study hours.

This online Postgraduate Certificate offers you the benefits of a scientific, teaching and technological high-level course. These are some of its most notable features:

- Latest technology in online teaching software.
- Highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand.
- Practical cases presented by practising experts.
- State-of-the-art interactive video systems.
- Teaching supported by telepractice.
- · Continuous updating and recycling systems.
- Self-regulating learning: full compatibility with other occupations.
- Practical exercises for self-evaluation and learning verification.
- Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- Communication with the teacher and individual reflection work.
- Content that is accessible from any fixed or portable device with an Internet connection.
- Supplementary documentation databases are permanently available, even after the course.



Cutting-edge training created to propel you toward greater competitiveness in the job market"



This training will provide you with the necessary knowledge to position yourself within the skin microbiotics sector in the field of physiotherapy with greater guarantees of success"

Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents: "learning from an exper"

Our teaching staff is made up of working professionals. In this way, we ensure that we provide you with the training update we are aiming for. A multidisciplinary team of professionals training and experienced in different environments, who will cover the theoretical knowledge in an efficient way, but, above all, will put the practical knowledge derived from their own experience at the service of the course: one of the differential qualities of this course.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your training.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice: with the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

With a methodological design based on proven teaching techniques, this Postgraduate Certificate will take you through different teaching approaches to allow you to learn in a dynamic and effective way





# tech 10 | Objectives



# **General Objective**

- Promote specialization in respiratory physiotherapy.
- Update knowledge and manage physiotherapy in different patients with respiratory pathologies.
- Possess knowledge of the pathophysiology and advanced exploration of the respiratory system.
- Execute, direct and coordinate the respiratory physiotherapy intervention plan for each patient.





# Objectives | 11 tech



# **Specific Objectives**

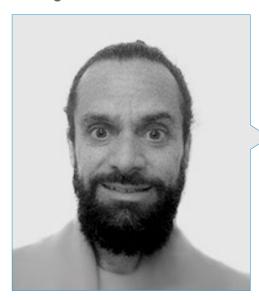
- Be up-to-date in different respiratory pathologies in children.
- Gain a deeper knowledge of pediatric respiratory emergencies.
- Apply the-instrumental techniques of infant respiratory physiotherapy.
- Delve into the treatment of physical therapy in pediatric palliative care.





# tech 14 | Course Management

### Management



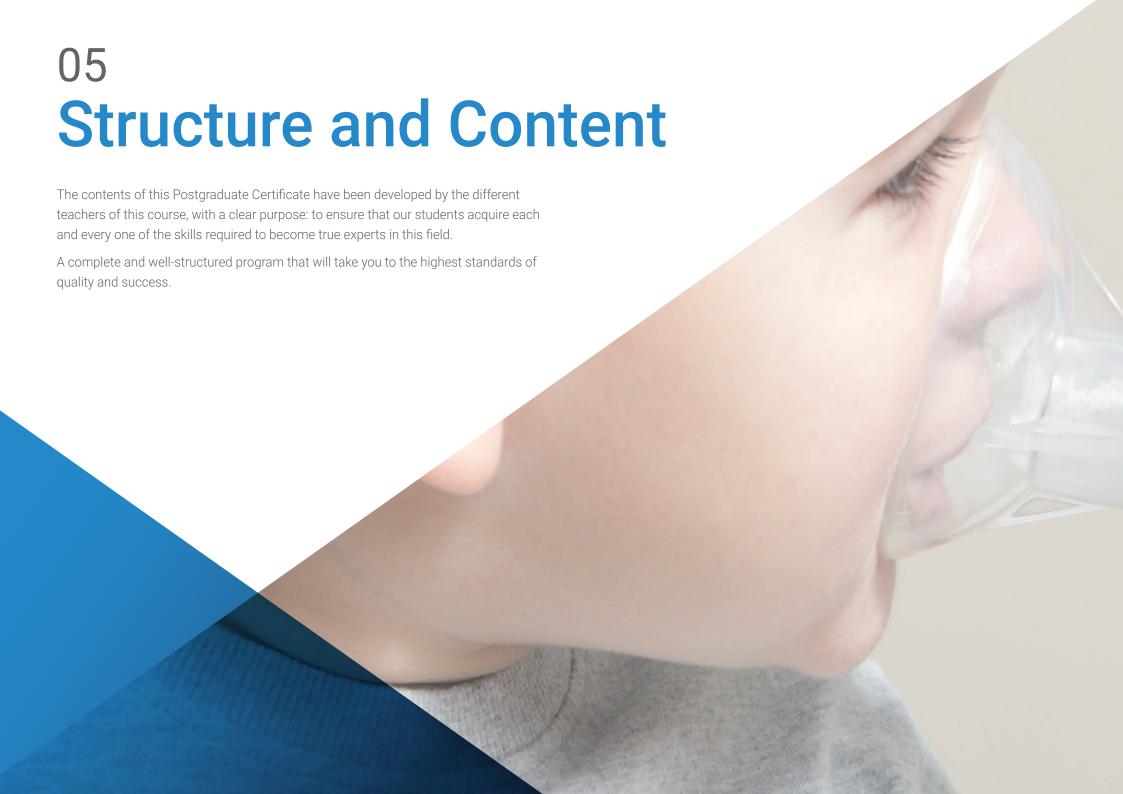
### Dr. García Coronado, Luis Pablo

- Physiotherapist at La Paz University Hospita
- Supervisor of the Physiotherapy Department at La Paz University Hospital
- Specialist in sports Physiotherapy, Re-training, electrotherapy, Pilates and Therapeutic exercise
- Director at Fisioespaña C. B.
- Director at Fisioganas S.L.
- Director at Pilates Wellness & Beauty S.L.

### **Professors**

### Dr. Macías Gaspar María José

- Physiotherapist at Beata Maria Ana Hospital since 20216. Physiotherapy in hospitalized patients, neurological patients and patients with surgeries and traumatic injuries. Internship tutor for students of the European University.
- Physiotherapist at La Paz University Hospital since 2018.
  Physiotherapy in Pediatrics: On the ward, in rooms, in neonates and ICU,
  Physiotherapy in patients hospitalized inICU, AER, patients with surgeries and traumatic injuries, and patients with traumatologic injuries.
- Diploma in Physiotherapy with specialization in Pediatric Physical Therapy and Manual Therapy in Traumatology and Orthopedics.
- Master's Degree in Pediatric Physiotherapy at CEU San Pablo in Madrid
- Master's Degree in Osteopathy at the D. François Ricard School of Osteopathy in Madrid
- Teaching, assistance and management functions. Clinical reasoning adapted to each individual.
- Expert in Respiratory and Cardiac Physiotherapy.



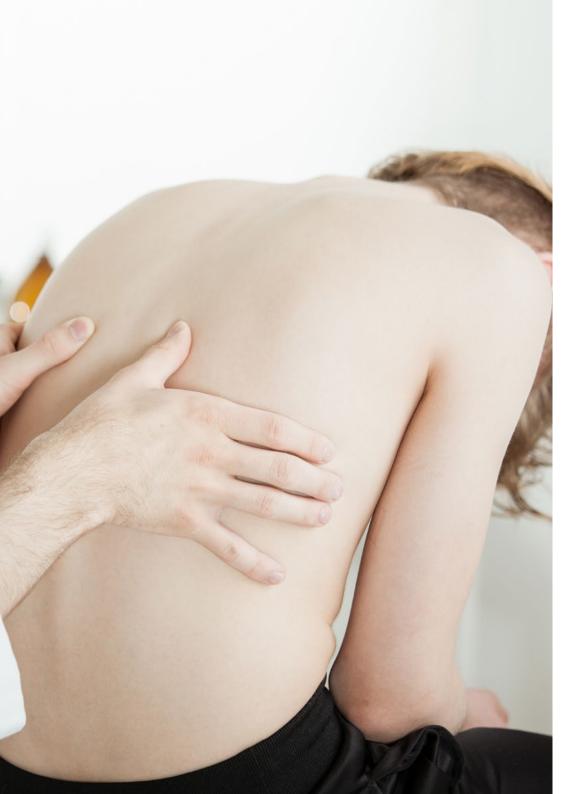


# tech 18 | Structure and Content

### Module 1. Pediatric Respiratory Physiotherapy II

- 1.1. Bronchitis in Pediatric Patients
  - 1.1.1. Etiology.
  - 1.1.2. Clinical Presentation.
  - 1.1.3. Medical Treatment.
- 1.2. Pneumonia in Pediatric Patients
  - 1.1.1. Etiology.
  - 1.1.2. Clinical Presentation.
  - 1.1.3. Medical Treatment.
- 1.3. Assessment in Respiratory Physiotherapy of the Pediatric Patient (3)
  - 1.3.1. Spirometry.
  - 1.3.2. Stress Tests.
  - 1.3.3. Peak Flow.
- 1.4. Assessment in Respiratory Physiotherapy in Pediatric Patients with Brain Damage
  - 1.4.1. Assessment of the Respiratory System.
  - 1.4.2. Assessment of Other Systems that May Affect the Respiratory System.
- 1.5. Non-Instrumental Techniques in Children's Respiratory Physiotherapy (3)
  - 1.5.1. EDIC.
  - 1.5.2. Autogenous Drainage.
  - 1.5.3. Cough Assistance.
- 1.6. Non-Instrumental Techniques in Children's Respiratory Physiotherapy (1) Adaptation in Patients with Brain Damage
  - 1.6.1. ELPR.
  - 1.6.2. Nasal Wash.
  - 1.6.3. Provoked Cough.
- 1.7. Instrumental Techniques in Children's Respiratory Physiotherapy (1)
  - 1.7.1. Cought Assist.
  - 1.7.2. High-Frequency Oscillation Vest®.





# Structure and Content | 19 tech

- 1.8. Instrumental Techniques in Children's Respiratory Physiotherapy (2)
  - 1.8.1. Ambu.
  - 1.8.2. Secretion Aspirator.
- 1.9. Respiratory Physiotherapy in Pediatric Palliative Care
  - 1.9.1. What Is Palliative Care?
  - 1.9.2. Typical Respiratory Pathologies of These Patients.
  - 1.9.3. Physiotherapy Treatment in Pediatric Palliative Care.
- 1.10. Respiratory Emergencies in Pediatrics
  - 1.10.1. Resuscitation in Pediatrics.



A unique, key, and decisive Training experience to boost your professional development"





# tech 22 | Methodology

In a given situation, what would you do? Throughout these months, the physician will face multiple simulated clinical cases based on real patients in which they will have to investigate, establish hypotheses and finally, resolve the situation. This method makes physicians learn better as they accept more responsibility and get closer to the reality of their professional future.



Did you know that this method was developed in 1912 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"



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.

It is a technique that develops critical skills and prepares the doctor to make decisions, defend their arguments, and contrast opinions According to Reynolds, there are four fundamental reasons that support the effectiveness of the case method applicable to Medicine:



Physicians develop their mental abilities best by evaluating real situations and applying concepts.



Physicians will be better prepared for the development of their professional activity.

03

Ideas and concepts are better assimilated when they are analyzed in situations that have arisen from reality.

04

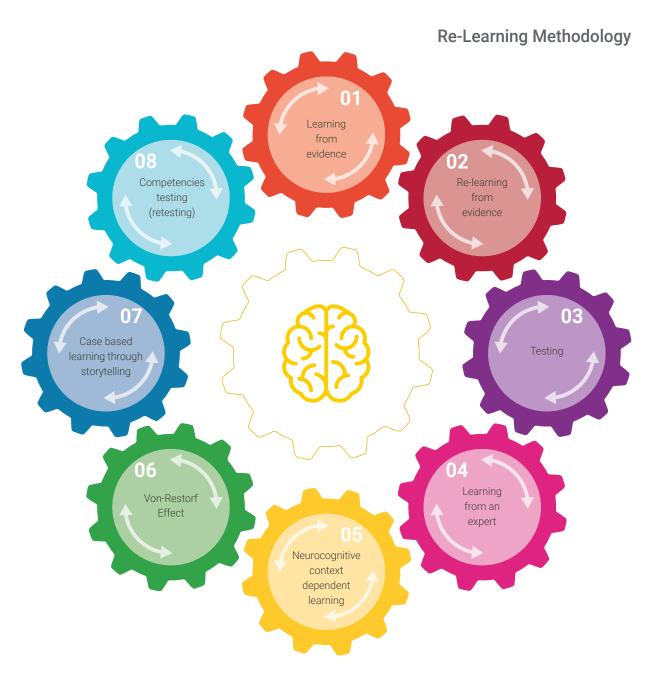
Physicians voluntarily devote more time to work as they find it more interesting to work with cases.

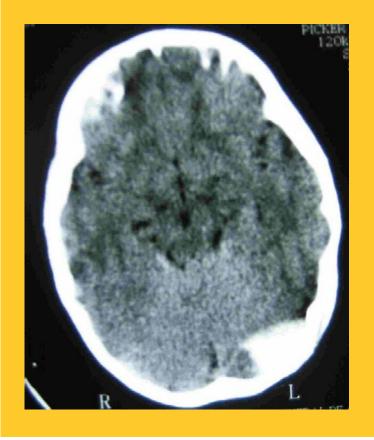


The physician will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-theart software to facilitate immersive learning"

...we enhance them with the best 100% online teaching method: Relearning...

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 8 different elements in each lesson, which represent a revolution with respect to simply studying and analyzing cases.





This methodology, at the forefront of world teaching, is called Re-learning. Our school is the first in Spanish-speaking countries licensed to use this successful method, having achieved in 2015 to improve the overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) of Doctor who complete the courses with respect to the indicators of the best online university in Spanish-speaking countries.

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

In our **Postgraduate Certificate in Pediatric Respiratory Physiotherapy** learning is not a linear process, but happens in a spiral (we learn-unlearn (forget) and relearn); that is why we combine each of these elements in a concentric way.

With this methodology we have trained more than 40,000 Doctor unprecedented success, in areas such as pediatrics, surgery, infectious diseases, hepatology, etc. All this in a highly demanding environment, with a university student body with a high socioeconomic profile and an average age of 42 years.

... and all this with the best learning materials at the forefront of technology and pedagogy...

In this Postgraduate Certificate you will have access to the best educational material, prepared with you in mind:



### **Study Material**

After a complex production process, we transform the best content into high-quality educational and audiovisual multimedia. We select the best syllabus and make it available to you. Everything you need to acquire in-depth knowledge of a discipline, from A to Z. Lessons written and chosen by specialists in each of the disciplines.



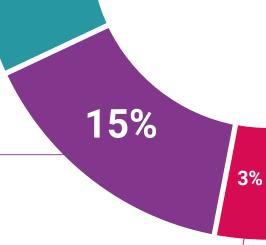
### Surgical techniques and clinical procedures on video

We bring you closer to the newest techniques, to the latest scientific advances, to the forefront of current doctor news. 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 training system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



20%

15%



### **Additional Reading**

Recent articles, consensus documents, international guides... in our virtual library you will have access to everything you need to complete your training.

# 20%

7%

### **Expert-Led Case Studies and Case Analysis**

Through the narratives of expert professionals, it is possible to acquire a high degree of understanding of the most frequent problematic situations. The professional's healthcare practice is not alien to the context in which it takes place. If we want to train ourselves to improve our professional practice, this training must be situated within the context in which it takes place.



### **Testing & Re-testing**

We periodically evaluate and re-evaluate your knowledge throughout this program through activities and evaluative exercises.



### Classes

There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an expert strengthens knowledge and recall, and generates confidence in our future difficult decisions



### **Quick Action Guides**

One of the most important functions of our team is to select those contents considered essential and present them in the form of worksheets or quick action guides to facilitate their understanding.







## tech 30 | Certificate

The Postgraduate Certificate in Pediatric Respiratory Physiotherapy contains the most complete and updated scientific program on the market.

After students have passed the evaluations, they will receive their corresponding **Postgraduate Certificate** issued by TECH-Technological University.

The diploma 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 Pediatric Respiratory Physiotherapy

ECTS: 6

Official Number of Hours: 150



<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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