



## Postgraduate Certificate

Airway Endoscopy in Pediatrics

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

Official N° of hours: 150 h.

Website: www.techtitute.com/pk/physiotherapy/postgraduate-certificate/airway-endoscopy-pediatrics

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## tech 06 | Introduction

In addition to requiring in-depth knowledge of these techniques, this training requires a specific theoretical and practical program. When these techniques are offered in hospitals it is a sign of quality health care. Nowadays patient parents familiar with the latest technologies demand professionals who have mastered them and can treat their children with minimally invasive techniques such as endoscopy and laparoscopy. These techniques can diagnose and treat many of the surgical pathologies of pediatric patients.

Therefore, it is reasonable to promote the training of professionals in this discipline, whose teaching is not regulated, having to resort to postgraduate training that includes different professional experts in this field as teachers.

In this program, the majority of endoscopic techniques used today in the pediatric patient will be studied in depth. Focusing on minimally invasive techniques, we will review the part of pediatric surgery that can be diagnosed or treated using Endoscopy.

In order to guarantee all of the above, the best experts in the field will contribute their personal experience and present the latest trends in each of their areas.

Improve the quality of patient care with this highly scientifically rigorous program"

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

- The latest technology in online teaching software
- A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- Practical cases presented by practicing experts
- State-of-the-art interactive video systems
- Teaching supported by telepractice
- Continuous updating and recycling systems
- Autonomous 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
- Banks of complementary documentation permanently available, even after the program is complete



Our teaching staff is composed of medical professionals, practicing specialists. That way, we can ensure that we offer students the up-to-date training that we aim to provide at TECH. A multidisciplinary team of qualified and experienced physicians in different settings who will develop the theoretical knowledge in an efficient manner, but, above all, will bring to the course the practical knowledge derived from their own experience: one of the differential qualities of this Postgraduate Certificate.

Mastering the subject will be complemented by the effective methodology used throughout this Postgraduate Certificate by our multidisciplinary team of *e-learning experts*, as 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 learning: 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.

You will have the latest multimedia tools, designed by experts in Airway Endoscopy in Pediatrics, which will favor assimilation and learning speed.









## tech 10 | Objectives



## **General Objectives**

- Complement the training of specialists in pediatric surgery with special interest placed on minimally invasive techniques, pediatric Endoscopy
- Adequately prepare these professionals to face with confidence and quality the different pediatric pathologies that can be addressed through these access routes
- Enable students to offer professional assistance supported by an accredited teaching program







## **Specific Objectives**

- Know the instrumentation necessary to perform rigid and flexible bronchoscopy in the pediatric patient
- Study the pathology susceptible to treatment by this route and the endoscopic techniques that are applied for its treatment



Don't miss the opportunity and get up to date on new developments in Airway Endoscopy in Pediatrics to incorporate them into your daily medical practice"







## tech 14 | Course Management

### Management



### Dr. Cabezalí Barbancho, Daniel

- Specialist in Pediatric Surgery
- Specialist Area Physician (FEA) of the Pediatric Surgery Service, Urology Section,12 de Octubre Hospital Madrid
- Doctor of Medicine and Surgery, Complutense University of Madrid

### **Professors**

### Dr. Gómez Fraile, Andrés

- Specialist in Pediatric Surgery
- Head of the Pediatric Surgery at 12 de Octubre Hospital
- Doctor of Medicine and Surgery, Complutense University of Madrid





Take the first step to get up to date on the latest developments in Airway Endoscopy in Pediatrics"





## tech 22 | Structure and Content

### Module 1. Airway Endoscopy

- 1.1. Sedation and Anesthesia in Pediatric Bronchoscopy
- 1.2. Bronchoscopy
  - 1.2.1. Exploration of the Airway in the Otorhinolaryngological Practice
  - 1.2.2. Equipment and Instrumentation in Rigid and Flexible Bronchoscopy
  - 1.2.3. Indications of Rigid and Flexible Bronchoscopy
- 1.3. Diagnostic Procedures I
  - 1.3.1. Bronchoalveolar Lavage
  - 1.3.2. Total Lung Lavage
- 1.4. Diagnostic Procedures II
  - 1.4.1. Endobronchial and Transbronchial Biopsy
  - 1.4.2. EBUS (Ultrasound-Guided Biopsy)
  - 1.4.3. Bronchoscopy and Study of Swallowing
- 1.5. Therapeutic Procedures I
  - 1.5.1. Extraction of Foreign Bodies
  - 1.5.2. Pneumatic Dilation
  - 1.5.3. Placement of Stents in the Airway
- 1.6. Therapeutic Procedures II
  - 1.6.1. Laser Procedures
  - 1.6.2. Cryotherapy
  - 1.6.3. Other Techniques: Endobronchial Valves, Sealants and Drug Application
  - 1.6.4. Technique Complications

- 1.7. Specific Laryngeal Pathologies I
  - 1.7.1. Laryngomalacia
  - 1.7.2. Laryngeal Paralysis
  - 1.7.3. Laryngeal Stenosis
- 1.8. Specific Laryngeal Pathologies II
  - 1.8.1. Laryngeal Tumors and Cysts
  - 1.8.2. Other Less Frequent Pathologies: Clefting
- 1.9. Specific Tracheobronchial Pathologies I
  - 1.9.1. Tracheal/Bronchial Stenosis: Congenital and Acquired
  - 1.9.2. Tracheobronchomalacia: Primary and Secondary
- 1.10. Specific Tracheobronchial Pathologies II
  - 1.10.1. Tumors
  - 1.10.2. The Tracheotomized Patient: Care
  - 1.10.3. Other Less Frequent Pathologies: Clefting, Granuloma





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





## tech 22 | Methodology

### 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:

- 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.



## Methodology | 25 tech

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.

## tech 26 | Methodology

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 adapted in 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**

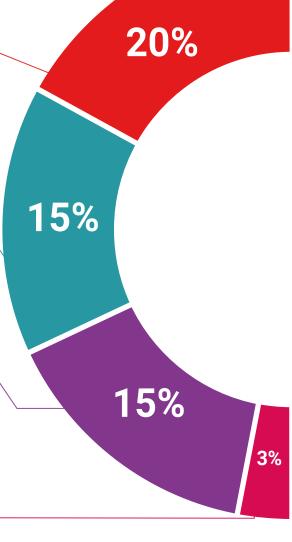
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many 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 ve learning ought to be contextual. Therefore, TECH presents real cases in which

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.

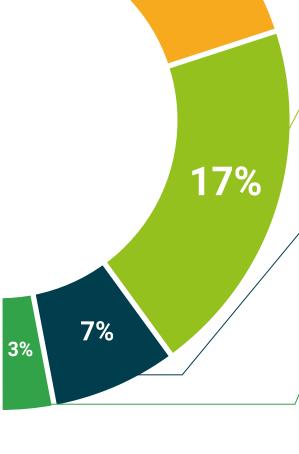
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.





20%





## tech 34 | Certificate

This **Postgraduate Certificate in Airway Endoscopy in Pediatrics** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

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June 17, 2020



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