



### Postgraduate Certificate

# Sleep-Wake Disorders in Pediatrics

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/sleep-wake-disorders-pediatrics

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### tech 06 | Introduction

There is an increasing multidisciplinary interest in Sleep Medicine, a rapidly growing discipline. Whether approached from a global point of view or from "partial specialisation", depending on the original field of medicine or specific area of interest, it is always vital to have rigorous and up-to-date generic knowledge in all areas. This Postgraduate Certificate more than fulfills this objective from an eminently practical point of view. Its approach sets it apart from many other courses on this very transverse discipline, which are often criticised for being too "descriptive" and "theoretical", and therefore not entirely useful in resolving many situations that arise in clinical management.

With the clear objective of combining scientific evidence and practical utility, this Diploma in Sleep-Wake Disorders in the Pediatric Age has a broad, up-to-date and unbeatable program, prepared by a varied team of professional experts (physicians, psychologists, biologists, engineers, etc.) who contribute their proven experience in the form of explanations and practical examples, entertaining, clarifying and abundant support, graphic-audiovisual, absolutely essential in the teaching of this thriving discipline.

In addition, this Postgraduate Certificate has the advantage of being developed in a 100% online format, so students will be in charge of deciding when and where to study, distributing their study hours to suit them, so that they can combine their specialisation with the rest of their daily commitments.

This **Postgraduate Certificate in Sleep-Wake Disorders in Pediatrics** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies, presented by experts in international cooperation of the peoples of the world
- The graphic, schematic, and practical contents provide students with scientific and practical information on the disciplines that are essential for professional practice
- The latest news on Sleep-Wake Disorders in Pediatrics
- Practical exercises, where the self-assessment process can be carried out to improve learning
- Emphasis on innovative methodologies in International Cooperation
- 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



We offer you a comprehensive Postgraduate Certificate, allowing you to progress in the field of Sleep-Wake Disorders in the Pediatrics. Think no more and enrol with us"



This Postgraduate Certificate is the best investment you can make when choosing a refresher program to update your existing knowledge in Sleep-Wake Disorders in Pediatrics"

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

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

We offer you an interactive video system which makes it easier for you to study this Postgraduate Certificate.

Our 100% online specialization and our original educational methodology allow you to combine your studies with your other daily commitments.







### tech 10 | Objectives



### **General Objectives**

• Master and/or update the necessary skills and knowledge for adequate practice in the field of Sleep Medicine at a global level, from the clinical and instrumental points of view



Train yourself for success with the help of this Postgraduate Certificate with which you will learn to develop yourself in the field of Sleep-Wake Disorders in the Pediatric Age"







### **Specific Objectives**

- Gain in-depth knowledge of the characteristics of normal sleep in children and adolescents and identify the physiological changes that are produced (during sleep) while the brain continues to develop until adulthood
- Master knowledge of each and every one of the different pathologies most frequently
  associated with childhood and adolescence (SAHS, RLS, insomnia, Parasomnias, ESD,
  circadian rhythm..., etc. knowing their symptoms, diagnosis and treatment in children and
  adolescents, as well as the differential characteristics in terms of the symptoms, diagnosis
  and treatment of these same disorders in adulthood
- Learn the different pre-existing diagnostic techniques to correctly diagnose the most common childhood sleep disorders and, to know the differences in procedure and interpretation of those performed on adults
- Become familiar with skills in the understanding and management of sleep
  disorders associated with children with chronic diseases (asthma, diabetes, etc. or
  neurodevelopmental delay (ADHD and ASD) Understand that early identification and
  appropriate treatment of the sleep disorder associated with the underlying pathology will
  improve the patient's quality of life and may have a bearing on the evolution and prognosis
  of the underlying disease





The program's teaching staff includes leading experts in Sleep Medicine, who bring to this specialization the experience of their years in the profession. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.

### tech 14 | Course Management

#### **International Guest Director**

Dr. Craig Canapari is an eminent specialist in **Pediatric Pulmonology and Sleep Medicine**. He has been internationally recognized for his commitment to the study and treatment of sleep disorders in children, as well as his work in the field of **pulmonary diseases**. Throughout his extensive professional career, Dr. Canapari has had an outstanding praxis focused on treating pediatric patients with chronic and life-threatening respiratory diseases.

As director of the Pediatric Sleep Medicine Program at Yale-New Haven Children's Hospital,
Dr. Canapari has been dedicated to the management of various disorders such as Sleep Apnea
and Obstructive Sleep Apnea. He also treats those suffering from general pulmonary problems,
including cough, shortness of breath and asthma, as well as those suffering from Muscular
Dystrophy. In this field, he is noted for his interdisciplinary approach, combining Pneumology,
Neurology and Psychiatry in the research and treatment of these complex disorders.

In addition to his clinical expertise, Dr. Canapari is a celebrated researcher who has collaborated with other Harvard professionals to develop innovative tools, such as a smart phone application to assist parents in sleep training. His tireless efforts have also focused on how the use of CPAP machines can help children with Obstructive Sleep Apnea improve their quality of life. His in-depth knowledge in this area has led him to publish the book It's Never Too Late to Sleep Train: The Low-Stress Way to High-Quality Sleep for Babies, Kids, and Parents.

To this must be added his exceptional work as an Assistant Professor of **Pediatrics**, specializing in **Respiratory Medicine**, at the **Yale School of Medicine**. There he contributes to both clinical care and the training of future **pediatric** and **pediatric pulmonology professionals**.



## Dr. Canapari, Craig

- Director of the Pediatric Sleep Medicine Postgraduate Certificate Program at Yale-New Haven Children's Hospital
- Attending Physician in Pediatric Pulmonology and Sleep Medicine at Yale-New Haven Children's Hospital
- Assistant Professor of Pediatrics, Respiratory Medicine, Yale School of Medicine, Yale University School of Medicine
- Doctor of Medicine, University of Connecticut School of Medicine
- Specialist in Pediatric Pulmonology and Sleep Medicine



### Management



### Dr. Larrosa Gonzalo, Óscar

- Specialist in Clinical Neurophysiology, San Rafael Hospita
- Expert in Sleep Medicine (CEAMS accredited, first national exam, 2013)
- Coordinator and founder of the Sleep Medicine Unit of MIPsalud, Madrid. Specialist and clinical consultant in sleep medicine at the Center of Neurological Diseases in Madrid and at the Multidisciplinary Unit for Sleep Disorders in San Rafael Hospital in Madrid, Spain
- Member of the Spanish Sleep Society (SES), founding member and former coordinator of its working group on Sleep Behaviour and Behavioural Disorders
- Member of the Spanish Society of the Neurophysiology Clinic (SENFC), founding member and former coordinator of its working group on sleep disorders
- Honorary Member, medical advisor and recommended specialist of the Spanish Restless Legs Syndrome Association (AESPI)
- Director of the Online Course "RESTLESS LEGS SYNDROME (WILLIS-EKBOM DISEASE)", (AESPI/Information without borders) for healthcare professionals, July 2016 July 2017

### **Professors**

### Dr. Sans Capdevila, Óscar

- Specialist in Clinical Neurophysiology
- Expert in Sleep Medicine (CEAMS accredited, 2013), European Somnologist (ESRS accredited, 2014)
- Coordinator of the Sleep Unit at the Sant Joan de Beu Children's Hospital, Barcelon, Spain
- Lecturer in the Professional Master's Degree in Paediatric Neurology (UB)
- Lecturer in the Professional Master's Degree in Psychopathology (UAB)
- Member of the following scientific societies:
- Spanish Society of Sleep (SES), member of its board of directors (treasurer)
- American Academy of Sleep Medicine (AASM)
- International Paediatric Sleep Association (IPSA)
- European Sleep Research Society (ESRS)
- Member of local committee at the 2013 World Congress of Sleep Medicine, Valencia, Spain
- Reviewer of publications in the following medical journals:
- Neurology Journal (Spain)
- Paediatrics (Sleep)

#### Dr. Petanàs Argemí, Joan

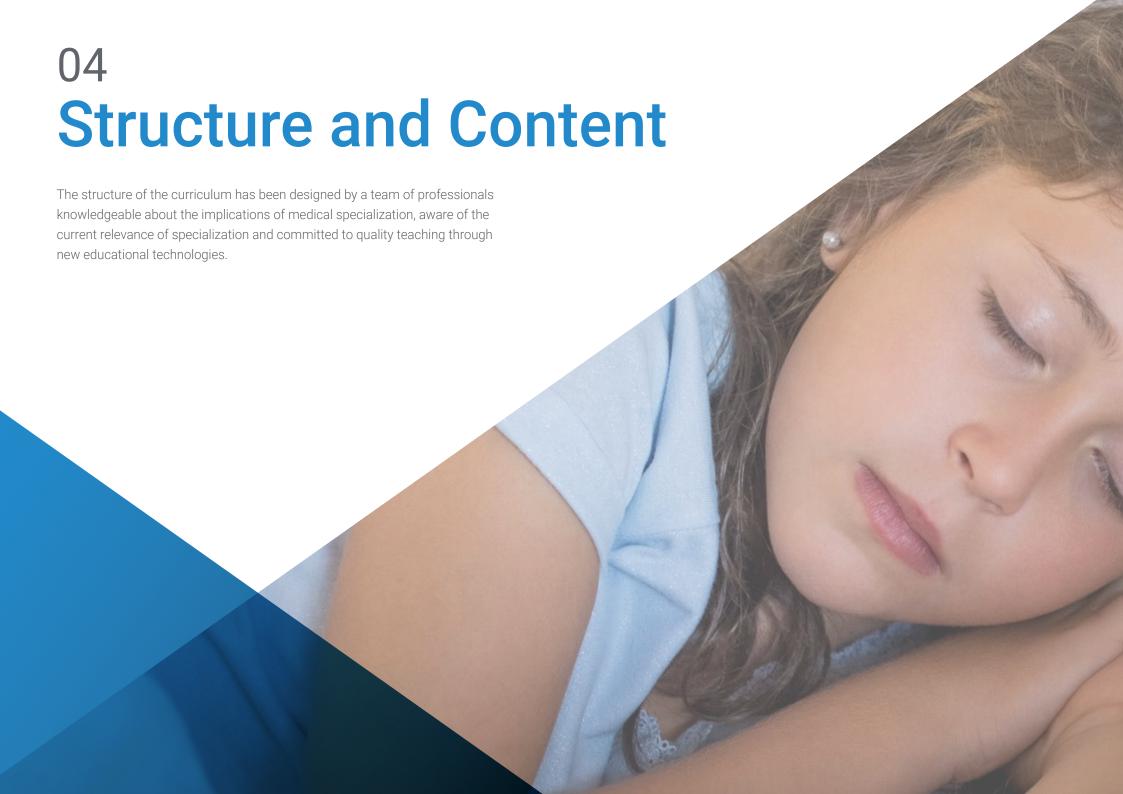
- Neuropediatrician attached to the Pediatric Medicine Service of the Corporació Sanitària Parc Taulí-Hospital de Sabadell
- Neuropediatrics at the Sant Joan de Déu hospital Barcelona

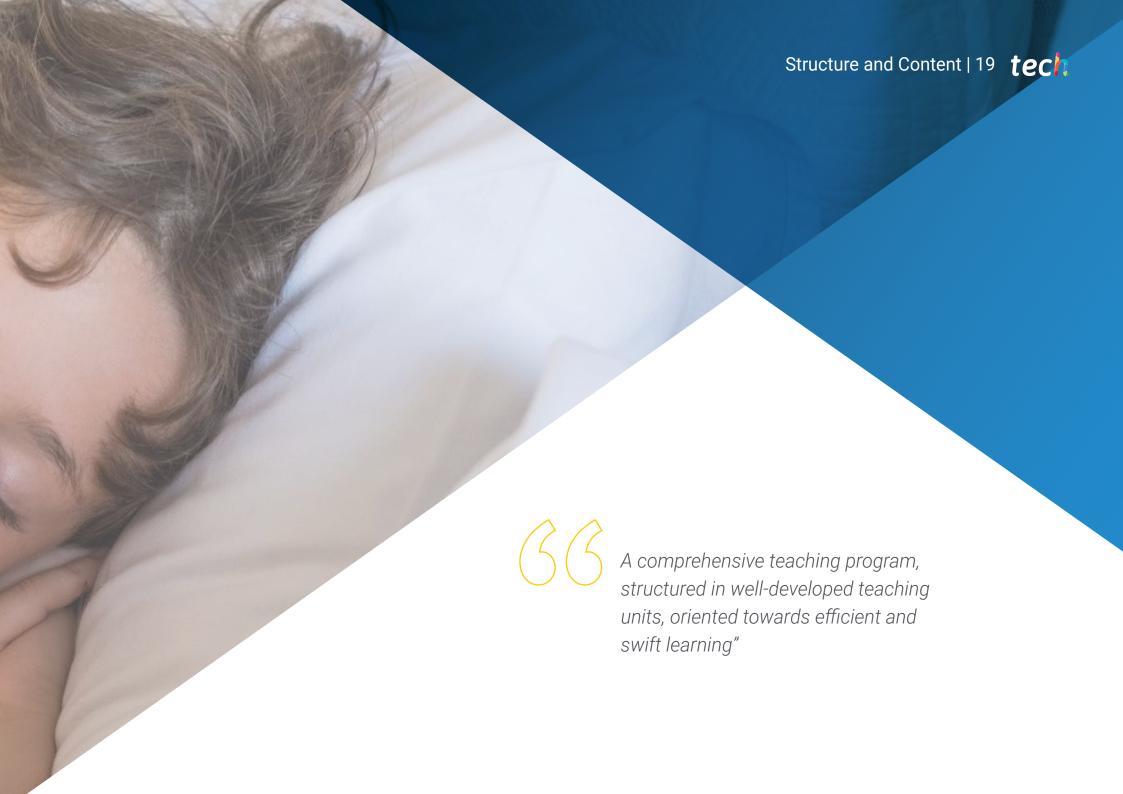
#### Dr. Aguilar Andújar, María

- Area Specialist in the Clinical Neurophysiology Service of the Virgen Macarena University Hospital of Seville. Head of the Sleep Disorder Unit at this hospital
- Medical Specialist in Clinical Neurophysiology Virgen del Rocío University Hospital, Seville
- Official Master's Degree in Physiology and Neuroscience from the University of Seville
- PhD in Medicine from the University of Seville



Take the leap to train with some of today's leading professionals. You will gain a competitive advantage in your profession"





### tech 20 | Structure and Content

### Module 1. Sleep-Wake Disorders in Childhood

- 1.1. Organisation and Ontogeny of Sleep in Childhood
  - 1.1.1. Differential Concepts in Sleep Architecture
  - 1.1.2. Sleep in Childhood and Adolescence
- 1.2. Predominant Sleep Onset Difficulties in Pediatrics
  - 1.2.1. Paediatric Insomnia
  - 1.2.2. Delayed Sleep Phase Syndrome
  - 1.2.3. Restless Leg Syndrome (Willis-Ekbom's disease) in Pediatrics
- 1.3. Respiratory Disorders During sleep (TRS) in Pediatrics
  - 1.3.1. Concepts and Types of TRS in the Pediatrics Age Group
  - 1.3.2. Pathophysiology of TRS in Children
  - 1.3.3. Consequences of Untreated TRS in Children
  - 1.3.4. Diagnosis of TRS in Children
  - 1.3.5. Treatment of TRS in Children
- 1.4. Parasomnias in the Pedriatic Age Group
  - 1.4.1. Parasomnias of NREM sleep
  - 1.4.2. Parasomnias of REM sleep
- 1.5. Rhythmic Disorders During Sleep: A Problem Almost Exclusively Found in Pediatric Patients
- 1.6. Excessive Secondary Daily Tiredness in Pediatrics Chronic Sleep Deprivation
- 1.7. Excessive Daytime Tiredness of Primary or Central Origin: Pediatric Issues
  - 1.7.1. Narcolepsy
  - 1.7.2. Kleine Levin Syndrome





### Structure and Content | 21 tech

- 1.8. Specific Pedriatic Pathologies and Sleep
  - 1.8.1. Asthma
  - 1.8.2. Allergies.
  - 1.8.3. Coeliac Disease.
  - 1.8.4. Childhood Diabetes
  - 1.8.5. Nocturnal Gastro-Oesophageal Reflux in Pediatrics
  - 1.8.6. Cystic Fibrosis
  - 1.8.7. Attention Deficit Hyperactivity Disorder (TDAH)
  - 1.8.8. Autism Spectrum Disorder (TEA)
  - 1.8.9. Prader Willi Syndrome
  - 1.8.10. Down Syndrome
- 1.9. Sleep Disorder Diagnostic Techniques in Pediatrics
  - 1.9.1. Sleep Diary
  - 1.9.2. Pediatric Actigraphy
  - 1.9.3. Paediatric Nocturnal Video-Polysomnography
  - 1.9.4. Multiple Latency Test in Pediatrics



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





### tech 24 | 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 abundant 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 Harvard case method with the best 100% online teaching methodology available: Re-learning.

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-theart software to facilitate immersive learning.



### Methodology | 27 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 Spanish-speaking 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 high socioeconomic profile and an average age of 43.5 years old.

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 (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 28 | 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 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**

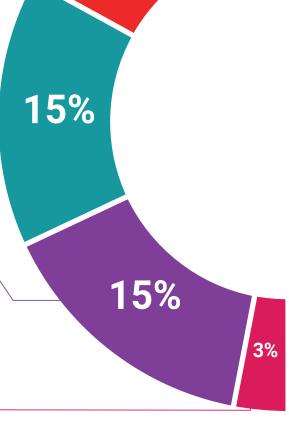
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many 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 & Re-testing**

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

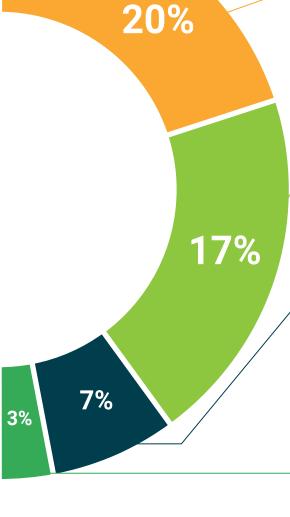
There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



#### **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.









### tech 32 | Certificate

This **Postgraduate Certificate in Sleep-Wake Disorders 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 diploma 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.

Title: Postgraduate Certificate in Sleep-Wake Disorders in Pediatrics
Official N° of Hours: 150 h.



<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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Sleep-Wake Disorders in Pediatrics

