

Professional Master's Degree

Sleep Medicine



Professional Master's Degree Sleep Medicine

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicine/professional-master-degree/master-sleep-medicine

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01

Introduction

This program highlights the overall emphasis on advances in the emerging fields of chronobiology and chronopathology as applied to the sleep-wake cycle. It also includes the latest findings related to neurodegeneration and, within the ever-complicated sleep behavior disorders, the concept of sleep-wake dissociation. In the more traditional fields, the most prevalent problems, such as insomnia, sleep-disordered breathing and restless leg syndrome, are given special attention, by clarifying the frequent grey areas and errors in their understanding and management. The practical and comprehensive presentation of diagnostic technology and its constant advances, is another of the many strengths of the program, which also has an extensive and distinctive area devoted to the practical knowledge of sleep disorders in paediatric patients.



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*A unique opportunity to specialise
in a high demand professional field”*

There is a growing multidisciplinary interest in Sleep Medicine, a rapidly growing discipline. Whether it is approached from a global point of view or from a "partial specialization", depending on the field of healthcare or specific area of interest, it is vital in all cases to have rigorous and up-to-date knowledge in this area. This Professional Master's Degree more than fulfils 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 a clear objective to combine scientific evidence and practical use, this Professional Master's Degree in Sleep Medicine provides a broad, up-to-date and unbeatable program created by a diverse group of professional experts (doctors, psychologists, biologists, engineers etc.). These experts contribute their proven experience in the form of explanations and practical examples that are both entertaining and insightful, as well as abundant graphic and audiovisual support, which is absolutely essential in the teaching of this growing discipline.

In addition, this course has the advantage of being conducted 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 studying with the rest of their daily commitments.

This **Professional Master's Degree in Sleep Medicine** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Practical cases presented by experts in Sleep Medicine
- ♦ The graphic, schematic, and practical contents provide students with scientific and practical information on the disciplines that are essential for professional practice
- ♦ Latest innovations on Sleep Medicine and safety
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Emphasis on innovative methodologies in Sleep Medicine
- ♦ 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 program so that you can progress in the field of Sleep Medicine. Think no more and enrol with us"

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This Professional Master's Degree is the best investment you can make when choosing a refresher program to update your existing knowledge of Sleep Medicine"

The teaching staff includes medical professionals who bring their experience to this training 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 deliver an immersive learning experience, programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the program. To do so, the specialist will be assisted by an innovative interactive video system created by renowned and experienced experts in Sleep Medicine.

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

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



02

Objectives

The main objective of the program is the development of theoretical and practical learning, so that the doctor is able to master the latest techniques in the field in a practical and rigorous manner.



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Our main objective is to help our students to achieve academic and professional excellence”

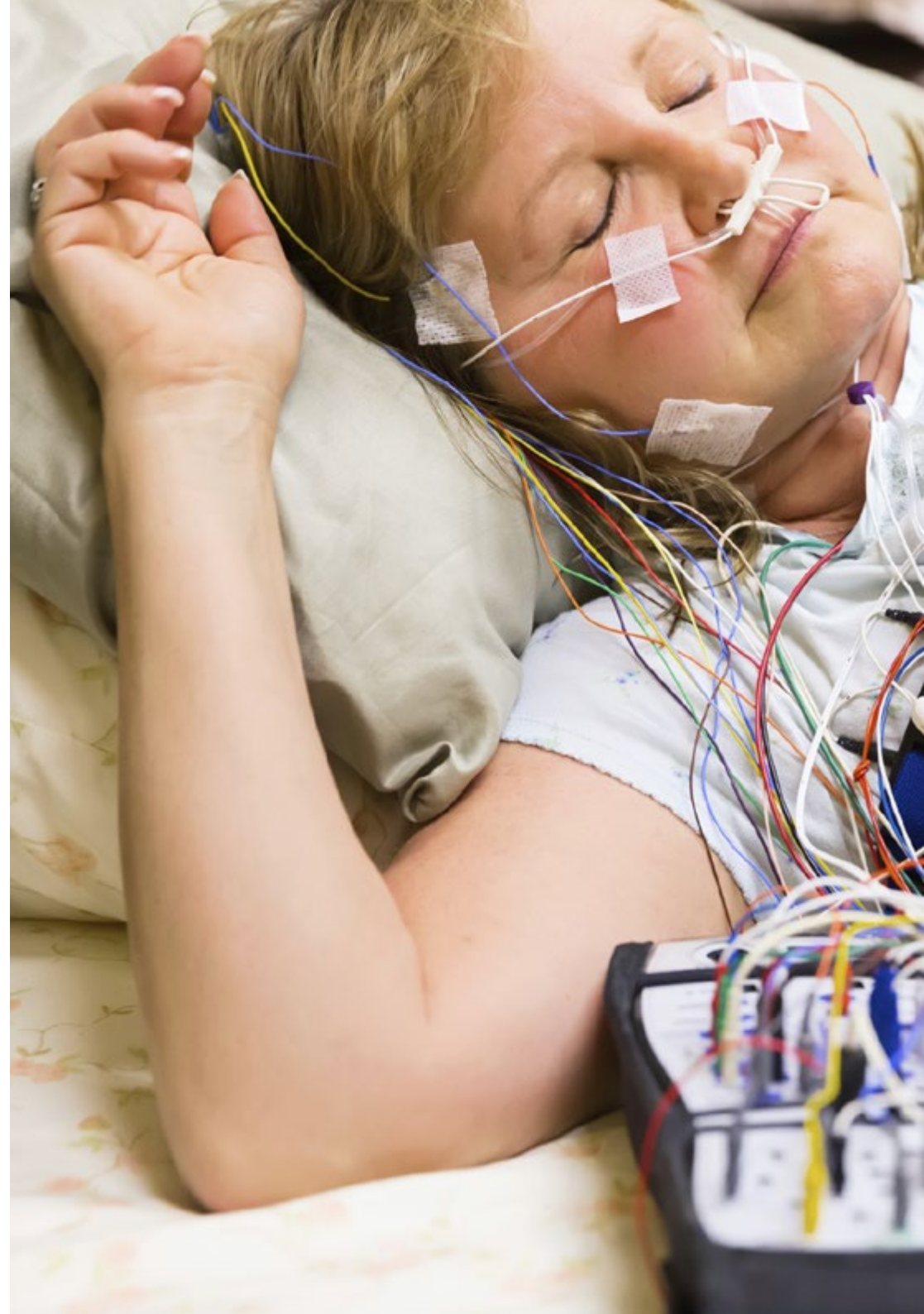


General Objective

- To 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



Become a professional by increasing your knowledge in this exciting field of study"





Specific Objectives

Module 1. Previous Fundamental Aspects of Sleep Medicine

- ◆ Develop a deep understanding of normal sleep, its structure, functions and its evolution throughout the different stages of life Understand the mechanisms implicated at a psychobiological and neurophysical level from a practical point of view
- ◆ Master the necessary fundamentals of the chronobiological factors involved in the regulation of sleep-wake cycles, as well as the evolution of the circadian system throughout a lifetime. Both are very important aspects in Sleep Medicine which the student will learn and understand in this module
- ◆ Understand in depth the meaning and the latest developments on the triggering factors in the field of the not-well-known and little understood dream activity, from a scientific evidence perspective
- ◆ Master a clear and up-to-date understanding of the not uncommon problems caused by the use of commonly used drug in prevalent medical problems that modify sleep-wakefulness
- ◆ Familiarise yourself with appropriate training in the accurate and structured conduct of taking a patient's clinical history and the initial orientation of the diagnostic process

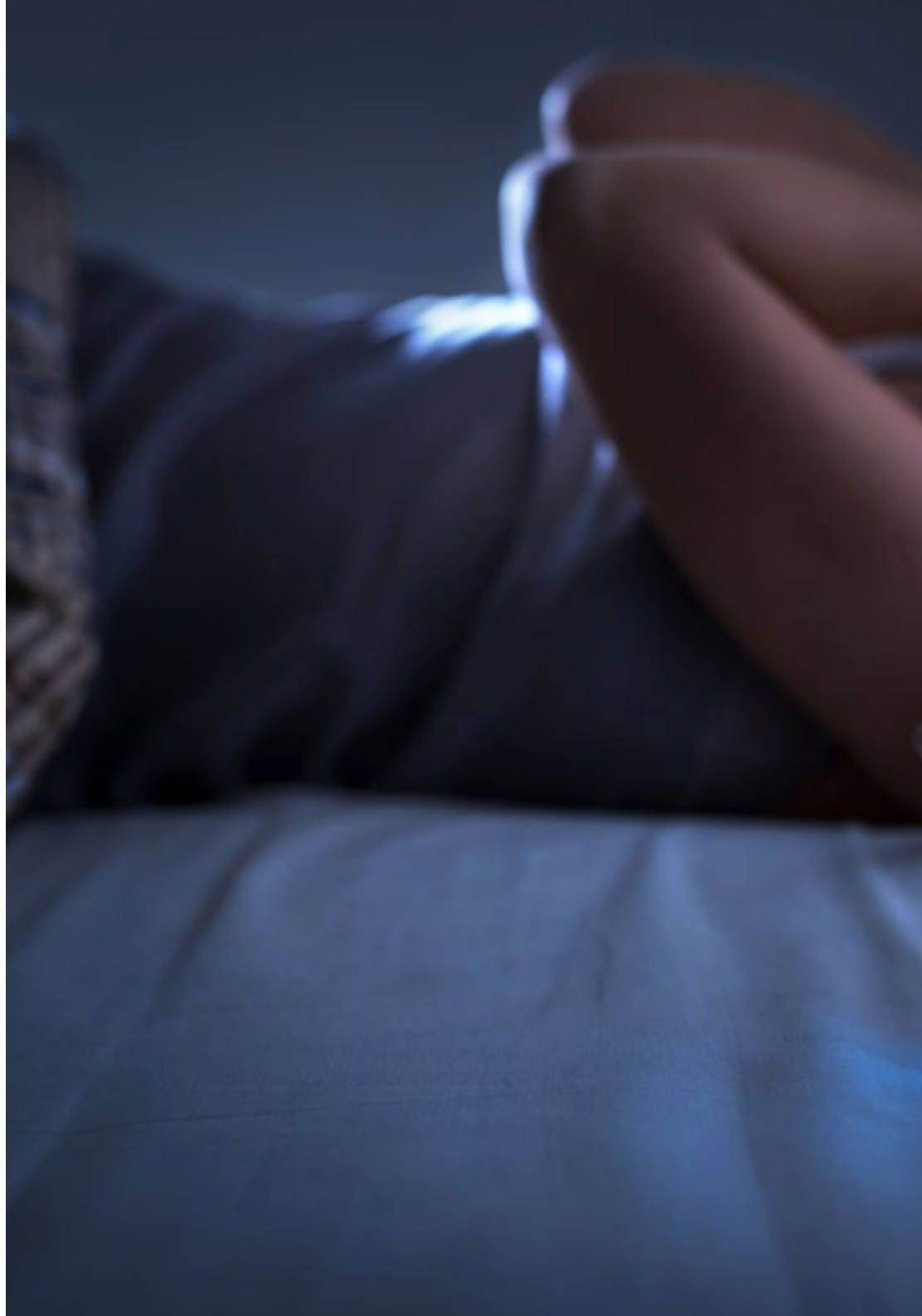
Module 2. Technical and Organizational Aspects of the Diagnostic Process

- ◆ Gain a deep understanding of which biological parameters are of interest in the different sleep recordings, how they can be recorded and how the sensors that monitor them work
- ◆ From the whole range of possible tests, students should acquire and master the skills to choose the most appropriate sleep test to be performed
- ◆ Gain the skills and understanding of the indications, recording, analysis and interpretation of all kinds of simplified systems in the diagnosis of sleep disorders

- ♦ Apply knowledge and skills on the indications, recording and practical problem solving during the Polysomnography (PSG) overnight sleep test, as a Gold-Standard of sleep study techniques
- ♦ Acquire the specific skills and training to perform analysis and interpretation of the sleep structure and all types of recorded events, as well as training to understand and evaluate external log reports
- ♦ Specialize in the current indications for PSG and learn when to extend or complement this test with a wide range of complementary elements
- ♦ Master the skills to implement and interpret additional instrumental tests to support the diagnosis in cases of daytime hypersomnolence or restless leg syndrome
- ♦ Gain a deep understanding of new ways of dealing with sleep disorders, through monitoring with sensors or with alternative systems different to the classic ones Some of them through wireless systems, pulse transit sensors, or the use of microwave sensors aimed at reducing the complexity of existing tests Others, such as circadian monitoring with chronosensors, aim to record key parameters for the diagnosis of sleep disorders that are not covered by classical tests
- ♦ Emphasize the importance of image and sound recording in sleep
- ♦ Define theoretical knowledge of how the bioelectrical signal can be analyzed with software integrated in the devices, in order to be able to program the different diagnostic devices and to use the tools that each one provides us with
- ♦ Specialize in how a sleep unit is organised at different levels of care To this end, the student will learn the different circuits for prevalent or specific sleep pathologies, which optimize resources and integrate the entire care process

Module 3. Insomnia in Adults. Sleep in Adult Psychiatry

- ♦ Obtain a global vision of the problems of insomnia in the adult population and its different types, as well as understand the importance and significance of the disorder and its need for treatment, given its frequency in the sleep clinic
- ♦ Master the necessary knowledge to carry out a diagnosis that allows for the selection of the most appropriate treatment for each case, often mixed and multidisciplinary





- ♦ Be able to understand in depth the different non-pharmaceutical treatments, and the different elements they are composed of; mainly the so-called cognitive-behavioural techniques. The student will learn to interpret the reports and will learn about their different tools, clarifying their indications and usefulness and laying the foundations for optimal collaboration between the different health professionals involved
- ♦ Train students in the pharmacological approach to insomnia problems, updating their knowledge in this regard, to help improve the prescription process, and to gain deeper understanding the strategic and individualized planning of the guidelines to be followed according to each case
- ♦ Gain an in-depth understanding of the scope of sleep problems, beyond insomnia, associated with different mental health problems, in order to facilitate their global management, highlighting the relevant role of achieving adequate sleep in the evolution of these pathologies

Module 4. Hypersomnia in Adults. Circadian Rhythm Disorders in Adults

- ♦ Learn to differentiate excessive daytime sleepiness from fatigue or anhedonia based on their clinical features and potential underlying causes. Know what is considered to be pathological daytime sleepiness and what diagnostic methods can help to objectify and quantify it
- ♦ Gain specific knowledge of the different hypersomnias of central origin and to learn to differentiate between them. The student will be trained and/or update their existing knowledge on the different therapeutic options available for these processes
- ♦ Master the knowledge and understanding of the different disorders due to circadian alteration of the wake-sleep cycle, both due to internal alterations and those caused by external factors

- ♦ Understand in depth the little known fundamental concepts on which the successful use of light therapy in the prevention and treatment of circadian disturbances is based, its possible modalities of use and its biological basis
- ♦ Provide a rigorous update on the other therapeutic options currently available for the treatment of this type of disorder, including the increasingly popular and widely used melatonin. The student will learn about myths and truths in the treatment of melatonin and will be brought up-to-date in the handling of its different formulas, some of which are new

Module 5. Rem Sleep Behavior Disorder (RBD): Clinical Aspects in Adults

- ♦ Gain in-depth knowledge of the clinical, scientific and technical aspects of sleep-related breathing disorders, in particular SAHS
- ♦ Update student's clinical skills in RBD with the aim of motivating them in their daily work
- ♦ Gain skills in identifying other sleep-related breathing disorders, beyond SAHS
- ♦ Develop and update skills in the personalized clinical management of patients with SAHS, primarily in the field of different non-invasive ventilation options and, beyond this, in the new developments in positional treatment and the recent findings and evidence in the pharmacological field

Module 6. Sleep-Related Breathing Disorders: Surgery, Dentistry and Functional Rehabilitation in SAHS

- ♦ Develop anatomical-functional knowledge of the upper airways and the examination methods used. These are very useful in guiding surgical and dental management to address the factors influencing upper airway obstruction. Special attention is given, although not exclusively, to the indications and methodology of modern somnoscopia technology (DISE)
- ♦ Specialize in the different surgical techniques, including multilevel techniques, their precise indications and their functionality in different situations, either as a stand alone technique or alongside others

- ♦ Apply skills in the utility, indications and mechanisms of action in modern dental devices and techniques, either used alone, as an alternative, or in combination with other therapeutic techniques
- ♦ Specialize in the different myofunctional techniques for rehabilitation of muscles involved in airway obstruction, their indications, how far and how they can help in the prevention and resolution of problems
- ♦ Know how to integrate all the techniques discussed on the decision-making level, in order to adequately protocolize the therapeutic approach to be followed in each patient, maintaining possible alternative or rescue solutions according to the particular evolution

Module 7. Behavioural and Movement Disorders During Sleep in Adults

- ♦ Gain an in-depth understanding of the field of parasomnias or behavioural disorders and other behavioural situations during NREM sleep and REM sleep, learning strategies for the necessary differential diagnosis between them and other conditions, understanding what their significance is and how they are managed
- ♦ Acquire knowledge in understanding the concept of sleep-wake dissociation and learn to identify, localise and manage the complex and still poorly understood elements integrated in the status dissociatus
- ♦ Acquire skills in the understanding and management of restless leg syndrome
- ♦ Learn about new developments in its production mechanisms and successfully address the resolution of the most problematic aspects of the disease, especially its correct diagnosis and proper management to avoid complications arising from inadequate treatment, a circumstance that is unfortunately all too frequent
- ♦ Know how to identify other disorders and movement during sleep of a very varied nature, some of which are very frequent, learning about their significance and how to deal with them

Module 8. Neurological Disorders Related to Sleep in Adults

- ♦ Master knowledge and understanding of the latest findings on the mechanisms by which memory is consolidated during sleep, as well as on the processing of information (sensory and motor)
- ♦ Deepen understanding of the concepts of neurobiology, neuroanatomy and neurophysiology of REM sleep behaviour disorder and its relationship with the different alpha-synucleopathies, as well as the relationship with different disease phenotypes and therapeutic implications
- ♦ Learn what other sleep disturbances can be found in these diseases, their management and prevention
- ♦ Learn about the main sleep disorders in the different dementias, in terms of their significance, diagnosis and therapeutic management
- ♦ Master skills in the knowledge of which other neurological disorders either affect sleep or are characterised by predominantly manifesting themselves during sleep, how they do so and what can be done. These disorders include certain forms of epilepsy, headaches and neurodegenerative autoimmune processes such as anti-IGLON 5 syndrome, among others
- ♦ Gain an in-depth understanding of what alterations occur in sleep disorders and what they involve in specific groups of neurological processes, such as neuromuscular diseases, the most common neurological autoimmune diseases, cerebrovascular diseases and traumatic brain injuries

Module 9. Sleep-Wake Disorders in Childhood

- ♦ 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 adults

- ♦ Learn the different pre-existing diagnostic techniques to correctly diagnose the most common childhood sleep disorders and 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 illness

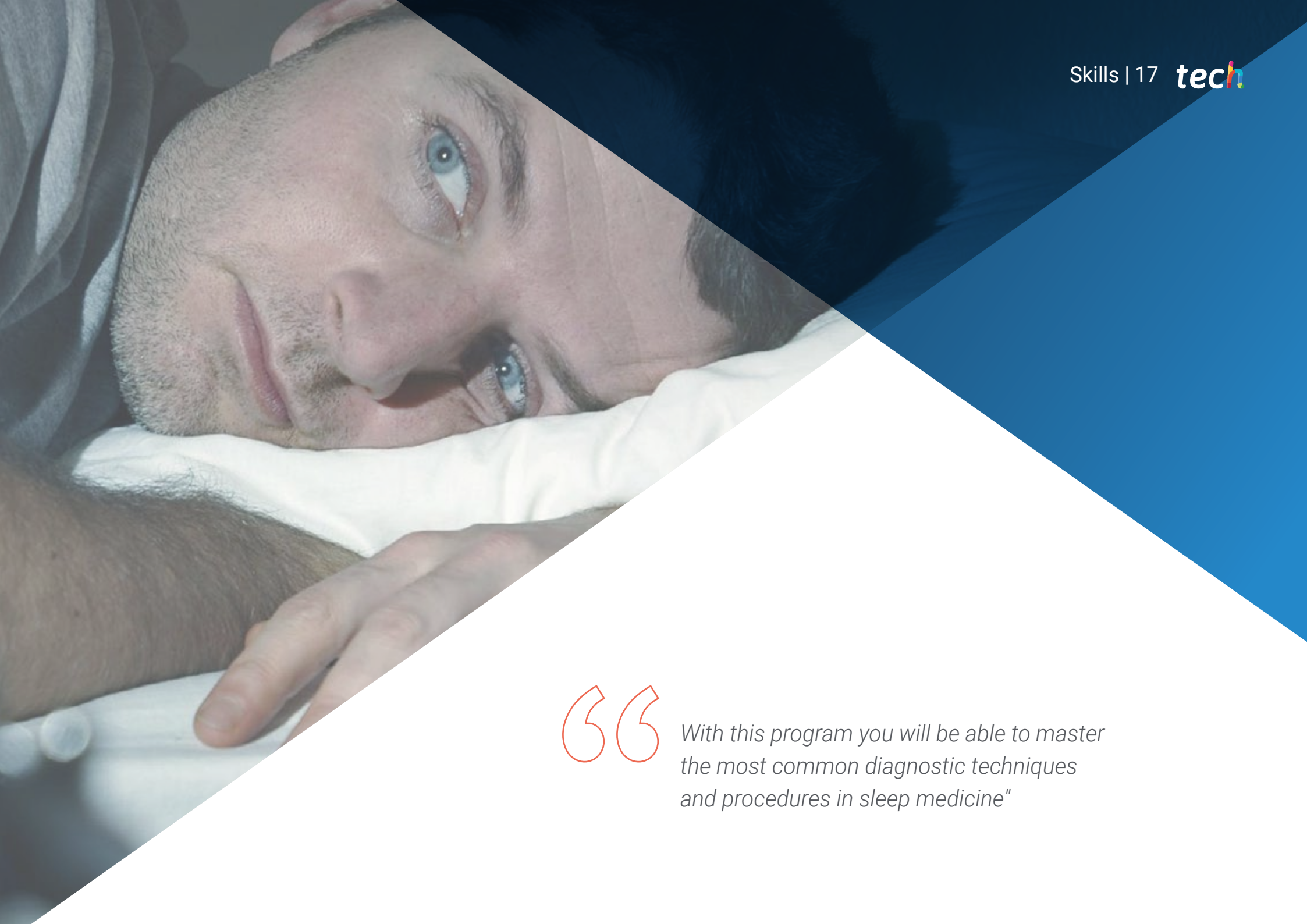
Module 10. Sleep in Other Medical and Social Situations. Sleep and Health

- ♦ Gain an in-depth understanding of the physiological changes that occur during sleep on a cardiovascular, digestive and endocrinological level and understand what is known about the influence of diet on sleep
- ♦ Acquire knowledge of the consequences of the alterations of these systems on sleep and vice versa, learning how to orientate, manage and inform the affected person of the situation
- ♦ Learn and be brought up-to-date on the latest innovative findings and implications in the mutual bidirectional relationship between sleep and cancer and between sleep and pain processes
- ♦ Gain up-to-date knowledge on the mutual influence of sleep and various situations such as confinement, hospitalization, living in high altitude areas and the relationship between sleep and aviation and space
- ♦ Specialize in the latest developments in the rapidly evolving fields of the relationship between sleep and sport and sleep and occupational and academic health
- ♦ Clarify the necessary knowledge needed in relation to the professional practice of sleep medicine and its legal aspects

03 Skills

After passing the assessments in the Professional Master's Degree in Sleep Medicine, the physician will have acquired the necessary professional skills for high quality, up-to-date practice based on the latest scientific evidence.





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With this program you will be able to master the most common diagnostic techniques and procedures in sleep medicine”

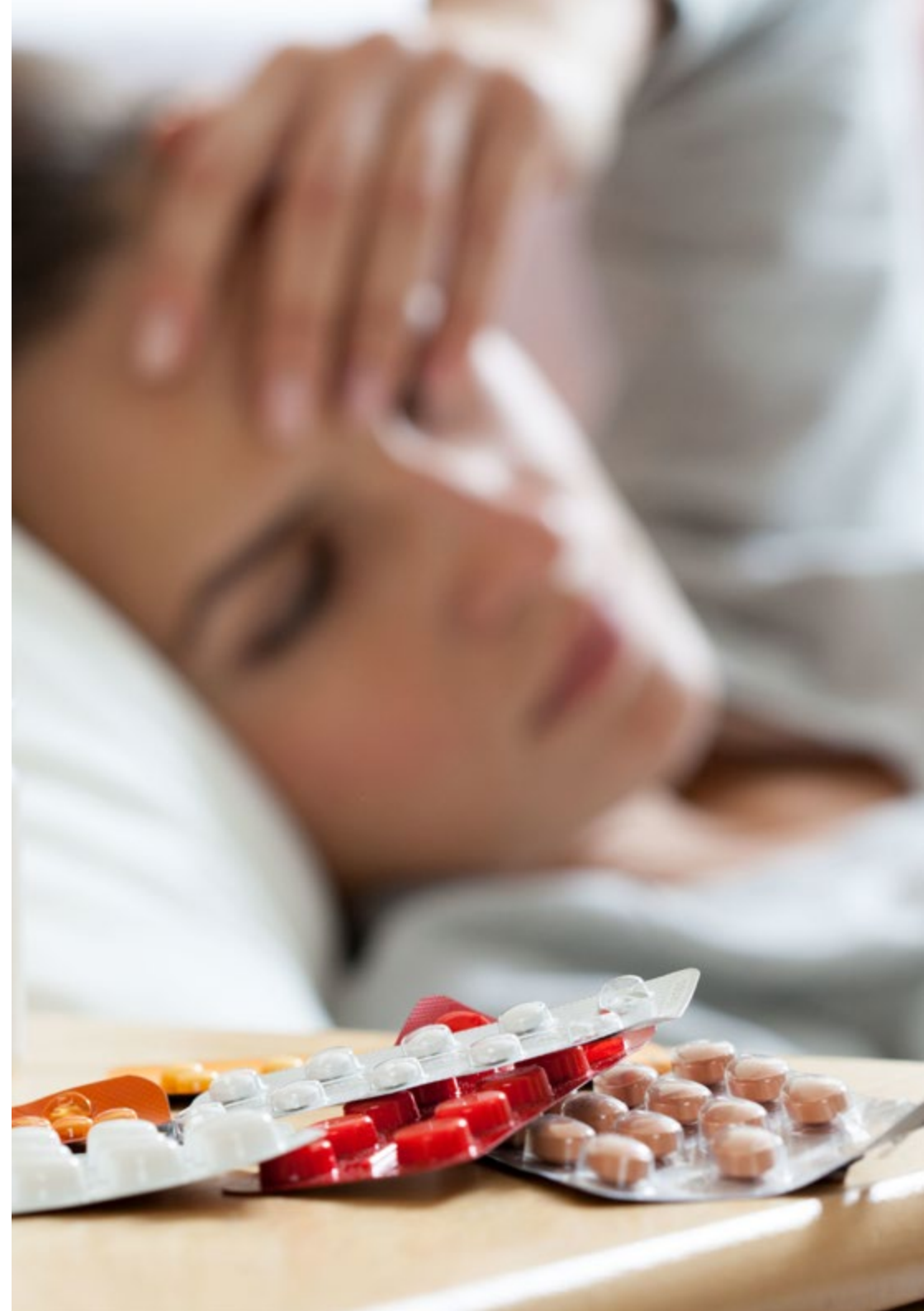


General Skills

- Understand the mechanisms implicated at a psychobiological and neurophysical level from a practical point of view
- Familiarize yourself with appropriate training in the accurate and structured conduct of taking a patient's clinical history and the initial orientation of the diagnostic process

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Prepare yourself for success with the help of this program that will help you to develop your skills in the field of sleep medicine”





Specific Skills

- ♦ Gain the skills and understanding of the indications, recording, analysis and interpretation of all kinds of simplified systems in the diagnosis of sleep disorders
- ♦ Gain an in-depth understanding of the scope of sleep problems, beyond insomnia, associated with different mental health problems, in order to facilitate their global management, highlighting the relevant role of achieving adequate sleep in the evolution of these pathologies
- ♦ Understand in depth the little known fundamental concepts on which the successful use of light therapy in the prevention and treatment of circadian disturbances is based, its possible modalities of use and its biological basis
- ♦ Gain the skills to identify other sleep-related breathing disorders, beyond SAHS
- ♦ Apply skills in the utility, indications and mechanisms of action in modern dental devices and techniques, either used alone, as an alternative, or in combination with other therapeutic techniques
- ♦ Gain knowledge of other neurological disorders that either affect sleep or are characterized by predominantly manifesting themselves during sleep, how they do so and what can be done. These disorders include certain forms of epilepsy, headaches and neurodegenerative autoimmune processes such as anti-IGLON 5 syndrome, among others etc.
- ♦ 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...), 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 adults
- ♦ Learn the different pre-existing diagnostic techniques to correctly diagnose the most common childhood sleep disorders and know the differences in procedure and interpretation of those performed on adults
- ♦ Familiarize yourself with competencies in the understanding and management of sleep disorders associated with children with chronic diseases (asthma, diabetes, etc.) or neurodevelopmental delays (ADHD and ASD)
- ♦ Understand that early identification and appropriate treatment of a sleep disorder associated with an underlying pathology will improve the patient's quality of life and may have a bearing on the evolution and prognosis of the underlying illness
- ♦ Clarify the necessary knowledge needed in relation to the professional practice of sleep medicine and its legal aspects

04

Course Management

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





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The leading professionals in the field have come together to offer you the most comprehensive knowledge in this field, so that you can develop with total guarantees of success"

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

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

Management



Dr. Larrosa Gonzalo, Óscar

- ♦ Specialist in Clinical Neurophysiology, San Rafael Hospital
- ♦ 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 (SENEC), 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. García de Gurtubay Gállego, Iñaki

- ♦ Specialist in Clinical Neurophysiology. Doctorate in Medicine. Expert in Sleep Medicine (CEAMS accreditation, 2013)
- ♦ Head of the Clinical Neurophysiology Service and Head of the multidisciplinary sleep pathology unit of CHN-SNS, Pamplona, Spain
- ♦ Lecturer and tutor of the practical side of the Professional Master's Degree in Biomedical Engineering of the ETS of Industrial and Telecommunication Engineering of the Public University of Navarra (UPNA)
- ♦ Member of the Spanish Society of the Neurophysiology Clinic (SENEC), founding member and former coordinator of its working group on sleep disorders
- ♦ Member of the Spanish Sleep Society (SES), founding member and former coordinator of its working group on movement and behavioural disorders during sleep
- ♦ Project Consultant as Biomedical Technology Expert at the Carlos III Health Institute
- ♦ Member of the Medical Technologies Assessment working group of the International Federation of Clinical Neurophysiology (IFCN)
- ♦ Medical Advisor to Walden Medical Neurodigital Therapies
- ♦ Member of the Neurophysiology of brain rhythms, epilepsy and sleep research group of the Navarra Health Research Institute- IdISNA
- ♦ Member of the Sociotechnology for Innovation in Health Group

Dr. Ortega-Albás, Juan José

- ♦ Head of the Sleep Unit at the Castellón General University Hospital
- ♦ Associate Professor of the Faculty of Medicine at Jaume I University in the field of Neurophysiology and Sleep
- ♦ Medical Specialist in Clinical Neurophysiology
- ♦ Expert in Sleep Medicine, accredited by the ESRS and CEAMS (Spanish Accreditation Committee of Sleep Medicine) /FESMES (Spanish Federation of Sleep Medicine Societies)
- ♦ Member of the Spanish Society of Sleep (SES) and the Spanish Society of Clinical Neurophysiology (SENEC)

Ms. Gismera Neuberger, Silvia

- ♦ Degree in Psychology. PhD in Biological Psychology from the Faculty of Medicine at the Autonomous University of Madrid
- ♦ CEO of www.dormirmejor.es
- ♦ Lecturer on the assessment committees in the Master's Degree in Healthcare Management and the Master's Degree in Patient Safety at the International University of Rioja (UNIR)
- ♦ Honorary Professor at the Autonomous University of Madrid (PhD teacher and professional practice tutor)
- ♦ Expert in Healthy Business Management (Instituto de la Salud y Bienestar, ISLB)
- ♦ Member of the Spanish Society of Sleep (SES)

Dr. Díaz de Terán López, Teresa

- ♦ Specialist in Internal Medicine. Specialist in Pulmonology
- ♦ Assistant Specialist Physician in the Pulmonology Department and in the Multidisciplinary Unit of Sleep Disorders and Ventilation of the Marqués de Valdecilla University Hospital, Santander, Spain
- ♦ Member of the following scientific societies
- ♦ Spanish Society of Pulmonology and Thoracic Surgery (SEPAR)
- ♦ Castilian-Leonese and Cantabrian Society of Respiratory Pathology (SOCALPAR)
- ♦ Spanish Society of Sleep (SES)
- ♦ Head Researcher in 1 research project and associate researcher in 5 multidisciplinary research projects in Sleep Medicine
- ♦ Training placement at Lane Fox Unit, St Thomas' Hospital, London (2017, 3 months)

Dr. Martínez Martínez, María Ángeles

- ♦ Specialist in Clinical Neurophysiology, Marqués de Valdecilla University Hospital, Santander, Spain. Expert in Sleep Medicine (CEAMS accreditation, 2013)
- ♦ Assistant Specialist Physician in the Pulmonology Department and in the Multidisciplinary Unit of Sleep Disorders and Ventilation at Marqués de Valdecilla University Hospital
- ♦ Master's degree in "Sleep: physiology and medicine" from the Pablo de Olavide University - Colegio de América, 2007
- ♦ Member of the Spanish Sleep Society (SES), founding member and former coordinator of its working group on movement and behavioural disorders during sleep
- ♦ Member of the Spanish Society of Clinical Neurophysiology (SENEC)
- ♦ Member of the Spanish Sleep Network
- ♦ Co-president of the XXV Annual Meeting of the Spanish Sleep Society, Santander, 2017
- ♦ Associate researcher in 4 research projects in sleep medicine in the last 5 years

Dr. Milán Tomás, Ángela

- ♦ Specialist in Neurology
- ♦ Expert in Sleep Medicine (CEAMS accreditation)
- ♦ Clinical Collaborator in Neurology, monographic consultations in Dementias and sleep disorders, at the Clínica Universidad de Navarra, Madrid, Spain
- ♦ Associate Professor at University of Navarra.
- ♦ Clinical-research Fellow at Sunnybrook Health Sciences Centre, Toronto (Canada), in cognitive neurology and movement disorders. (2016-2018)
- ♦ Research Fellow at University of Toronto (Canada) in Sleep Medicine (2014-2016)

Dr. Jiménez Ferreres, Luis

- ♦ Specialist in otorhinolaryngology and head and neck surgery, Autonomous University of Madrid. Doctorate in Medicine. (Universidad Complutense de Madrid)
- ♦ Assistant Doctor at the Department of Otorhinolaryngology and Cervico-Facial Surgery, San Rafael Hospital, Madrid
- ♦ Director of the Multidisciplinary Sleep Unit, San Rafael Hospital, Madrid
- ♦ Master's Degree in "Senior Healthcare Management", Arthur Andersen (Madrid)
- ♦ Master's Degree in "Sleep: physiology and medicine" from UCAM
- ♦ Member of the following scientific societies
- ♦ Spanish society of otorhinolaryngology and head and neck surgery (SEORL)
- ♦ Spanish Society of Sleep (SES)
- ♦ American Association of Sleep Medicine (AASM)
- ♦ Otorhinolaryngology Society of Madrid
- ♦ Otorhinolaryngology Society of Castilla la Mancha
- ♦ European Society of Pediatric Otorhinolaryngology (ESPO)
- ♦ Interamerican Association of Pediatric Otolaryngology. (IAPO)

Dr. Rodríguez Ulecia, Inmaculada

- ♦ Head of Clinical Neurophysiology Service at the San Roque Meloneras University Hospital, Maspalomas, Las Palmas (Canary Islands)
- ♦ Medical Specialist in Clinical Neurophysiology
- ♦ Master's Degree in Emergency Medicine, Cardenal Herrera University

Dr. Sans Capdevila, Óscar

- ♦ Medical 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, Barcelona, Spain
- ♦ Lecturer in the Master's Degree in Pediatric Neurology (UB)
- ♦ Lecturer in the 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 Pediatric 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)
- ♦ Pediatrics (Sleep)

Dr. Sanz Costa, Valentín

- ♦ Director of the Electro-encephalography Unit of the Neurology Service, Caracas University Hospital
- ♦ Pediatrician specialized in child neurology, with special academic training in neurophysiology applied to EEG, VideoEEG and in the treatment and surgery of childhood epilepsy
- ♦ Advances in Treatments in Child and Adolescent Psychiatry
- ♦ Professor of Neurophysiology and Post-Graduate Neurology, Central University of Venezuela

Dr. Puertas Cuesta, Francisco Javier

- ♦ Specialist in Clinical Neurophysiology (1997). PhD in Medicine from the Cardenal Herrera University CEU (2006). Diploma in Sleep Monitoring, Montpellier University (1998). Expert in Sleep Medicine, European Sleep Research Association (2012)
- ♦ Head of Neurophysiology Service and the Sleep Unit at Ribera University Hospital since 1999
- ♦ Professor in the Faculty of Medicine at the Catholic University of Valencia and head of the department of surgical specialties since 2019. Associate Professor in Physiology at the University of Valencia from 2001-2018
- ♦ Research and internships in Sleep Medicine at the University Hospital of Montpellier, France, from 1997 to 1998 and at the Sleep Medicine Center of the Mayo Clinic in Rochester, Minnesota, in 2002
- ♦ Current vicepresident of the Spanish Society of Sleep (SES) and president from 2006-2010, member of the directive board of the European Sleep Research Society (ESRS) from 2012-2014

Dr. Bonmatí Carrión, María Ángeles

- ♦ Degree in Biology from the University of Murcia
- ♦ PhD in Physiology from the University of Murcia
- ♦ Currently post-doctoral researcher at the University of Murcia; teacher in subjects in the department of physiology (in the degrees of Biology, Medicine and Biotechnology)
- ♦ Post-doctoral researcher at the University of Surrey (United Kingdom) (2016-2018)
- ♦ Teacher Training for Secondary and High School, Vocational Training and Language Teaching (2015, Miguel Hernández University)

Dr. Martínez Pérez, Francisco

- ♦ Clinical Neurophysiology Department, Puerta de Hierro University Hospital, Majadahonda, Spain
- ♦ Advanced neurophysiological studies at the MIP Health Clinic - Personalized Integrated Medicine
- ♦ Neurophysiology techniques applied at the Vitruvian Institute of Biomechanics and Surgery.
- ♦ Medical Specialist in Clinical Neurophysiology
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Master's Degree in Sleep: Physiology and Pathology, Pablo Olavide University
- ♦ Master's Degree in Neurological Electrodiagnosis from the University of Barcelona
- ♦ Researcher, university lecturer, professor of the Master's Degree in Sleep Medicine
- ♦ Author of several guidelines and consensus for different medical societies (SENFEC, SES, AEP) and the National Commission of the Specialty
- ♦ XXI Century National Prize in Medicine
- ♦ European Award in Medicine

Dr. Giménez Badia, Sandra

- ♦ Attending physician consultant in the Multidisciplinary Unit of Sleep, Santa Creu i Sant Pau Hospital, Barcelona
- ♦ Medical Specialist in Clinical Neurophysiology
- ♦ PhD in Medicine and Surgery
- ♦ Accredited as a specialist in Sleep Medicine by the Spanish, French and European Societies of Sleep
- ♦ Coordinator of the Cognition and Sleep group of the Spanish Society of Sleep
- ♦ Training internships in sleep units at internationally renowned centers (Stanford, Montpellier and Strasbourg)
- ♦ Associate Professor at University of Barcelona

Dr. Rodríguez Falces, Javier

- ♦ Telecommunications Engineer
- ♦ Interim Professor, Department of Electrical and Electronic Engineering, Public University of Navarre
- ♦ PhD in Communication Engineering

Dr. Jiménez Setuain, Izaskun

- ♦ Specialist in Pulmonology
- ♦ Sleep Multidisciplinary Unit. Navarra Hospital Complex. Pamplona
- ♦ Member of the Spanish Society of Pulmonology and Thoracic Surgery and of the European Respiratory Society

Dr. Azcona Ganuza, Gurutzi

- ♦ Medical Specialist in Clinical Neurophysiology
- ♦ Sleep Multidisciplinary Unit. Navarra Hospital Complex, Pamplona
- ♦ Pre-doctorate of the Master's Degree in Neurosciences and Cognition from the Clinical University of Navarra
- ♦ Member of the Spanish Society of Clinical Neurophysiology, the Association of Intraoperative Monitoring (AMINE) and the Spanish Society of Neurology (SEN)

Dr. Ramos-Arguelles Gonzalez, Fernando

- ♦ Medical Specialist in Clinical Neurophysiology
- ♦ Clinical Neurophysiology Services and the Sleep Unit at the Rotger Clinic-Baleares Quirónsalud Group, Mallorca
- ♦ Member of the Spanish Society of Sleep and the Spanish Society of Clinical Neurophysiology

Dr. Pabón Meneses, Rocío

- ♦ Medical Specialist in Clinical Neurophysiology
- ♦ Sleep Multidisciplinary Unit. Navarra Hospital Complex, Pamplona
- ♦ Postgraduate Diploma in Sleep Medicine Accredited by FESMES
- ♦ Member of the Spanish Society of Sleep and the Spanish Society of Clinical Neurophysiology

Dr. Ciorba Ciorba, Cristina

- ♦ Specialist in Pulmonology
- ♦ Sleep Multidisciplinary Unit. Navarra Hospital Complex, Pamplona
- ♦ Master's Degree in Advances in the Diagnosis and Treatment of Sleep from the University of Murcia
- ♦ Master's Degree in Neuromuscular Diseases and Respiratory Complications from the University of Versailles, Paris

- ♦ Postgraduate Diploma in Sleep Medicine Accredited by FESMES
- ♦ Postgraduate Diploma in Non-Invasive Mechanical Ventilation from the International School of NIMV
- ♦ Member of the Spanish Society of Pulmonology and Thoracic Surgery and of the European Respiratory Society

Mr. Madrid Pérez, Juan Antonio

- ♦ Graduate in Biological Sciences. PhD in Physiology
- ♦ Specialist in Chronobiology, Pierre et Marie Curie University, Paris
- ♦ Head Lecturer of Physiology
- ♦ Director of the Chronobiology Laboratory at the University of Murcia, IMIB-Arixaca and CIBERFES
- ♦ Member of the Spanish Society of Sleep and of the working group of Chronobiology
- ♦ Member of the Spanish Society of Physiological Sciences

Dr. Navallas Irujo, Javier

- ♦ Telecommunications Engineer
- ♦ Professor in the Department of Electrical Engineering, Electronics and Communication, Public University of Navarra
- ♦ PhD in Communication Engineering

Dr. Rol de Lama, María Ángeles

- ♦ Degree in Biological Sciences with a PhD grade from the Complutense University of Madrid
- ♦ Director of the Department of Physiology and Head Professor of the same department, University of Murcia. Founding member of Kronohealth SL
- ♦ Member of the Expert Committee of the Spanish Government for the study of the change of the official time. Member of the Innovation Commission of IMIB
- ♦ Member of the Spanish Society of Sleep and of the working group of Chronobiology

Dr. Imizcoz, María Alfonso

- ♦ Specialist in Pulmonology
- ♦ Sleep Multidisciplinary Unit. Navarra Hospital Complex. Pamplona
- ♦ PhD in Medicine and Surgery. Associate Professor at University of Navarra
- ♦ Expert in Sleep Medicine, accredited by the ESRS and CEAMS (Spanish , Accreditation Committee of Sleep Medicine) /FESMES (Spanish Federation of Sleep Medicine Societies)
- ♦ Member of the Spanish Society of Sleep and the Spanish Society of Pulmonology and Thoracic Surgery

Mr. Florido Gómez, Miguel

- ♦ Commercial Director in LEDMOTIVE, Barcelon, Spain
- ♦ Telecommunications Engineer
- ♦ Training in lamps, LED, technology & lighting

Dr. Rocío Martín, Esmeralda

- ♦ Specialist in Clinical Neurophysiology, La Princesa University Hospital, Madrid
- ♦ Specialist in Clinical Neurophysiology, Santa Elena University Hospital, Madrid
- ♦ Specialist in Clinical Neurophysiology (San Carlos Clinical Hospital, Madrid, Spain)
- ♦ Specialist in Sleep Medicine. Accredited by the Spanish Federation of Sleep Medicine Societies, 2020
- ♦ Master's degree in "Sleep: physiology and medicine" from the University of Murcia, 2019
- ♦ Member of the Spanish Society of Clinical Neurophysiology. Member of the Spanish Society of Sleep (and of the working group of Insomnia)
- ♦ Member of the Research Foundation at La Princesa University Hospital. Member of the American Society of Clinical Neurophysiology

Dr. Wix Ramos, Rybel

- ♦ Specialist in the Sleep Unit of the Clinical Neurophysiology Services at La Princesa University Hospital (Madrid, Spain), in the sleep unit of the neurology service, HM Sanchinarro Hospital (Madrid) and in the Sleep Unit of the Neurology Service, HM Puerta del Sur Hospital (Alcorcón, Madrid)
- ♦ PhD in Medicine from the CEU San Pablo Univeristy (Faculty of Medicine)
- ♦ Specialist in Clinical Neurophysiology at San Carlos Clinical Hospital, Madrid, Spain.
- ♦ Expert in Sleep Medicine, accredited by the CEAMS (2015), the World Sleep Society (2017) and the European Sleep Research Society (2018)
- ♦ Master's Degree in Sleep: Physiology and Medicine. Accredited by the Pablo de Olavide University (Seville, Spain), 2010
- ♦ Member of the Spanish Society of Clinical Neurophysiology
- ♦ Member of the Spanish Society of Sleep (and of the working group of Insomnia)

Mr. Martín Villa, Iván

- ♦ Founder member of Psicología360
- ♦ Founding member of EDS EL Psychology and Therapy
- ♦ Clinical Psychologist in MIPsalud, Madrid (Psychotherapist of sleep disorders and general health psychology)
- ♦ Collaborating Clinical Psychologist in the Adecco Foundation (Care for People with Disabilities) Clinical Psychologist in La Poveda Training and Development SL
- ♦ Degree in Psychology from UNED, Madrid, with a major in Clinical psychology Legal Psychological Expert
- ♦ Expert in behavioral disorders, addictions and alterations in adolescence

Dr. Sánchez Barros, Cristian

- ♦ Specialist in Clinical Neurophysiology and head of the Sleep Unit at the Juaneda Miramar Hospital of the Juaneda Healthcare Network Hospital Group, Palma de Mallorca (Balearic Islands, Spain)
- ♦ Specialist in Clinical Neurophysiology via MIR, San Carlos Clinical University Hospital, Madrid, Spain
- ♦ PhD in Medicine Cum Laude, at the Complutense University of Madrid
- ♦ Active member of the Spanish Society of Sleep (SES), the Colombian Association of Sleep Medicine and the Spanish Society of Clinical Neurophysiology (SENFC)
- ♦ Active member of the SES working group in movement and behavioral disorders during sleep
- ♦ International advisor in a research project on Huntington's disease led by the Caribbean Neurosciences Group of the Simón Bolívar University (Barranquilla-Colombia)

Dr. Gutiérrez Muñoz, Carmen

- ♦ Currently working in the Institute of Neurological Specialties (IENSA) and the Quirónsalud Hospital, Cordoba, Spain
- ♦ Specialist in Clinical Neurophysiology, Virgen Macarena University Hospital, Seville
- ♦ European certification as Sleep Medicine Specialist from the ESRS
- ♦ Master's Degree in Sleep: Physiology and Medicine from the University of Murcia
- ♦ Sleep Medicine courses with the American Association of Sleep Medicine (AASM), 2016-2018
- ♦ Member of the Spanish Society of Sleep (SES), American Association of Sleep Medicine (AASM) and the Spanish Society and Andalusian Society of Clinical Neurophysiology (SENFC, SANFC)

Dr. Albares Tendero, Javier

- ♦ Director of the Sleep Unit at the Teknon Medical Center Sleep Medicine Doctor Albares, Barcelona (Spain)
- ♦ Specialist in Clinical Neurophysiology, La Paz University Hospital, Madrid. European Specialist in Sleep Medicine. Qualification from the European Sleep Research Society
- ♦ Member of the Advisory Council for the Timetable Reform of the Government of Catalonia. Member of the Spanish Society of Sleep (SES)

Dr. Rodríguez Morilla, Beatriz

- ♦ Analysis of Circadian Rhythms in Kronohealth SL and Cronolab
- ♦ PhD in Psychology
- ♦ Degree in Psychology
- ♦ Master's Degree in Neuroscience
- ♦ Part of the Spanish Society of Sleep (SES) and the World Association of Sleep Medicine

Dr. Iznola Muñoz, María del Carmen

- ♦ Attending physician at the Virgen de las Nieves Hospital, Granada, Spain
- ♦ Specialist in Clinical Neurophysiology
- ♦ Doctor of Medicine and Surgery. Expert in Sleep Medicine accredited by FESMES (Spanish Federation of Sleep Medicine Societies)
- ♦ Active Member of the Spanish Society of Sleep (SES) and the Spanish Society and Andalusian Society of Clinical Neurophysiology (SENFC, SANFC)

Dr. Díaz Román, Mónica

- ♦ Faculty specialist in the Clinical Neurophysiology Services, Lluís Alcanyis Hospital, Xativa (Valencia), Spain
- ♦ Specialist in Clinical Neurophysiology, Valencia La Fe Hospital, Spain
- ♦ Expert in Sleep Medicine for the Spanish Committee of Accreditation in Sleep Medicine (CEAMS, FESMES)
- ♦ Master's Degree in "Sleep: Physiology and Medicine" from the University of Murcia
- ♦ Active member of the Spanish Society of Sleep (SES), the Spanish Society of Clinical Neurophysiology (SENEC) and the Spanish Society of Neurology (SEN)

Dr. Andretta Juárez, Guido Eduardo

- ♦ 4Th year, medical resident intern at the Marqués de Valdecilla University Hospital, Santander, Spain
- ♦ Degree in Medicine and Surgery (Guatemala)

Dr. Teresí Copoví, Irene

- ♦ Faculty specialist in the Clinical Neurophysiology Services, La Fe Polytechnic University Hospital of Valencia, Spain, with various years experience in the Multidisciplinary Unit of Sleep Disorders. Active Member of the Spanish Society of Clinical Neurophysiology (SENEC)
- ♦ Specialist in Clinical Neurophysiology, La Fe Polytechnic and University Hospital of Valencia

Dr. Ortega González, Ángel

- ♦ Attending physician in the Pulmonology Service, Coordinator of the Home Ventilation Unit and Pulmonology Tutor at the Nuestra Señora del Prado General Hospital, Talavera de la Reina (Toledo, Spain)
- ♦ Specialist in Pulmonology, Jiménez Díaz Foundation University Hospital, Madrid, Spain
- ♦ Master's Degree in Respiratory Support and Mechanical Ventilation, University of Valencia
- ♦ Master's Degree Distance Learning in Clinical Unit Management, University of Murcia
- ♦ Postgraduate Diploma in Patient Safety, Organization and Equipment, University of Cadiz

Dr. Ruiz Cubillán, Juan José

- ♦ Attending physician of the Pulmonology Services, Marqués de Valdecilla University Hospital, Santander, Spain
- ♦ Specialist in Pulmonology
- ♦ Master's Degree in Respiratory Support and Mechanical Ventilation, University of Valencia
- ♦ Member of the Spanish Society of Respiratory System Pathology (SEPAR) and of the European Respiratory Society (ERS)

Dr. Abascal Bolado, Beatriz

- ♦ Specialist in Pulmonology, Obstructive Pulmonary Disease Unit, Marqués de Valdecilla University Hospital, Santander, Spain
- ♦ Master's Degree in Advances in the Diagnosis and Treatment of Airway Diseases from the San Antonio Catholic University of Murcia
- ♦ Master's Degree in Advances in the Diagnosis and Treatment of Diffuse Interstitial Lung Diseases (DILD) from the San Antonio Catholic University of Murcia
- ♦ Master's Degree in Clinical Management of Care Units from the Spanish Society of Cardiology
- ♦ Member of the Spanish Society of Respiratory System Pathology (SEPAR) and of the European Respiratory Society (ERS)

Dr. Juarros Martínez, Santiago Antonio

- ♦ Head of the Breathing Disorders Unit at the Valladolid Clinical University Hospital
- ♦ Specialist degree in Pulmonology, Valladolid University
- ♦ Specialist Degree in Occupational Medicine from the Complutense University of Madrid
- ♦ Postgraduate Diploma in Sleep Medicine
- ♦ Master's Degree in Advances in the Diagnosis and Treatment of Sleep Disorders from the San Antonio Catholic University of Murcia)
- ♦ Member of the European Respiratory Society, the Spanish Sleep Society, the Spanish Society of Pulmonology and Thoracic Surgery, and the Castilian-Leonese and Cantabrian Society of Respiratory Pathology (Member of the Scientific Committee)

Dr. Vargas Arévalo, Carmen Rosa

- ♦ Attending physician in Pulmonology, Barcelona Clinical Hospital and Palamós Hospital
- ♦ Specialist in Pulmonology
- ♦ Studying a PhD in Medicine, University of Barcelona (UB), Clinical Hospital of Barcelona
- ♦ International postgraduate diploma in Non-Invasive Mechanical Ventilation Methodology from the Andalusian Society of Intensive Care Medicine and Coronary Units
- ♦ Postgraduate Diploma in Pathology of the Pleura, the University of Barcelona

Dr. González Martínez, Mónica

- ♦ Assistant Specialist Physician in the Pulmonology Department and in the Multidisciplinary Unit of Sleep Disorders and Ventilation of the Marqués - de Valdecilla University Hospital, Santander, Spain)
- ♦ PhD in the Department of Pathological Anatomy, Microbiology, Preventative Medicine and Public Health and Toxicology, University of Zaragoza, Spain
- ♦ Specialist in Pulmonology

Dr. Cristeto Porras, Marta

- ♦ Resident of 4th year of Pulmonology at the Marqués de Valdecilla University Hospital
- ♦ Degree in Medicine from the University of Salamanca
- ♦ Training geared towards Sleep Pathology and Ventilation Has presented different sleep medicine communications in national congresses
- ♦ Internship in France to complete her training in the Outpatient Unit of Home Respiratory Apparatus and in the Functional Unit of Respiratory Care and Rehabilitation of the Pulmonology and Resuscitation Service R3S at the Pitié-Salpêtrière Hospital in Paris
- ♦ Member of different scientific societies such as the Spanish and Cantabrian Society of Respiratory Pathology (SOCALPAR), Spanish Society of Respiratory Tract Pathology (SEPAR), Respiratory Sleep Disorders, Mechanical Ventilation and Critical Respiratory Care Area (TRS-VM-CRC) and the European Respiratory Society (ERS)

Dr. Marco Garrido, Alfonso

- ♦ Attending physician at the ENT Unit at Reina Sofia University Hospital Murcia
- ♦ Degree in Medicine and Surgery from the Faculty of Medicine of the University of Murcia
- ♦ Faculty specialist in Otorhinolaryngology through a medical residency internship carried out at the Virgen de la Arrixaca Healthcare Center (Murcia)
- ♦ Postgraduate Diploma in Respiratory Sleep Disorders, Snoring and Applied Rhinology Faculty of Medicine. Autonomous University of Nuevo León. Monterrey. Mexico. Coordinator Dr. Rodolfo Lugo Saldaña
- ♦ Member and Spokesperson of the Murcia Society of ENT (SORLMU)
- ♦ Member of the Spanish Society of Sleep (SES)
- ♦ Founding member of the Ibero-American Society of Sleep Surgery (SIBECS)
- ♦ Member of the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR)
- ♦ Spokesperson of the Commission on Roncopathy and Sleep Disorders. Spanish Society of Otorhinolaryngology and Head and Neck Surgery

Dr. Fernández Jáñez, Cristina

- ♦ Teacher in different training projects in centers such as VITHAS Arturo Soria Hospital of Madrid
- ♦ Degree in Medicine from the University of Navarra
- ♦ Internships at the Great Ormond Street Hospital for Children (London) "Visiting Observer" Program in the Pediatric Otorhinolaryngology and Head and Neck Surgery department
- ♦ Specialist training through medical residency internship from the Spanish Ministry of Health and Consumer Affairs in Otorhinolaryngology at the Gregorio Marañón General University Hospital (Madrid)

Dr. Bazán Inostroza, Borja

- ♦ Resident physician of Otorhinolaryngology and Head and Neck Surgery at La Princesa University Hospital (Madrid)
- ♦ Doctoral thesis carried out in the Faculty of Medicine at the Autonomous University of Madrid

Dr. Guillén Lozada, Enrique

- ♦ Faculty specialist in Otorhinolaryngology and Cervicofacial Pathology at Niño Jesús Children's University Hospital
- ♦ Faculty specialist in Otorhinolaryngology and Cervicofacial Pathology at Nuestra Señora de América Hospital
- ♦ Otorhinolaryngology and Head and Neck Surgery medical residency internship Virgen del Rocío University Hospital
- ♦ Master's Degree in Medical Research: Clinical and Experimental University of Seville
- ♦ Cum Laude PhD in Molecular Biology, Biomedicine and Clinical Research University of Seville
- ♦ Postgraduate Diploma in Voice Pathology. University of Alcalá

Dr. De Carlos Villafranca, Félix Antonio

- ♦ Professor of Orthodontics at the University of Oviedo
- ♦ Director of the Master's Degree in Orthodontics at Deusto University
- ♦ Degree in Medicine and Surgery. Specialist in Stomatology
- ♦ Master's Degree in Orthodontics and Dentofacial Orthopedics
- ♦ Doctor of Medicine and Surgery
- ♦ Postgraduate Diploma in Sleep Medicine: Accredited by the Spanish Committee of Sleep Medicine
- ♦ Postgraduate Diploma in Sleep Dental Medicine: Accredited by the Spanish Federation of Sleep Societies
- ♦ Member of the SFODF (French Society for Dento-Facial Orthopedics)
- ♦ Active member of SEDO (Spanish Society of Orthodontics), AESOR (Spanish Association of Orthodontic Specialists), EOS (European Orthodontic Society), SOCEFF (Spanish Society for Facial Fissures), EADSM (European Academy of Dental Sleep Medicine), SES

Ms. Neves Leal, Daniela

- ♦ Exclusive clinical practice in Myofunctional Orofacial Therapy, author and co-author of scientific publications and books related to oral respiration, sleep apnea, maxillofacial surgery and lingual frenulum
- ♦ Teaching collaboration in various Undergraduate Degrees and Master's Degrees in Dentistry, Orthodontics and Pediatric Dentistry
- ♦ Degree in Speech Therapy from the Complutense University of Madrid
- ♦ Master's Degree in the Advances in Speech Therapy Intervention and a Master's Degree in Orofacial Motricity - Speciality in Orofacial Myofunctional Therapy
- ♦ Postgraduate Degree in Myofunctional Rehabilitation and Dentistry
- ♦ Ambassador of the TBI technique in Spain and specialist in the evaluation and rehabilitation of the lingual frenulum (TBI-EUA)

Dr. Fernández Arcos, Ana

- ♦ Associate physician at AdSalutem Sleep Institute
- ♦ Coordinator of the Sleep Study Group of the Spanish Society of Neurology and a member of the Spanish Sleep Society
- ♦ Specialist in Neurology in the Santa Creu i Sant Pau Hospital, Barcelona
- ♦ PhD in Medicine and Translational Research and Master's Degree in Sleep Disorders from the University of Barcelona
- ♦ European expert in Sleep Medicine, accredited by the ESRS (European Sleep Research Society)

Dr. Aguilar Andújar, María

- ♦ Faculty Specialist in the Clinical Neurophysiology Department of the Virgen Macarena University Hospital, Seville Head of the Sleep Disorders Unit in this hospital
- ♦ Medical Specialist in Clinical Neurophysiology. Virgen del Rocío University Hospital, Seville
- ♦ Master's Degree in Physiology and Neuroscience from the University of Seville
- ♦ PhD in Medicine from the University of Seville

Dr. Urrestarazu Bolumburu, Elena

- ♦ Clinical Neurophysiology Service Consultant. Monographic consultations on sleep disorders, at Navarra Clinical University
- ♦ Associate Professor at University of Navarra
- ♦ Medical internship residency in Neurology, Navarra Clinical University Pamplona
- ♦ Medical internship residency in Clinical Neurophysiology, Navarra Clinical University Pamplona
- ♦ Research Fellow in Epilepsy Montreal Neurological Institute (McGill University). Montreal, Canadá

- ♦ Expert accreditation in Sleep Medicine from the European Sleep Research Society (ESRS) and expert training in Sleep Medicine from the CEAMS (Spanish Committee of Accreditation in Sleep Medicine)
- ♦ Member of the Spanish Society of Neurology (SEN), Spanish Society of Clinical Neurophysiology (SENEC), Spanish Society of Sleep (SES), European Sleep Research Society (ESRS), American Academy of Sleep Medicine (AASM) and World Sleep Society

Dr. Escobar Ipuz, Fredy A.

- ♦ Faculty specialist of Clinical Neurophysiology at the Virgen de la Luz de Cuenca Hospital, Spain
- ♦ Medical internship residency in Clinical Neurophysiology, Navarra Clinical University
- ♦ European expert accreditation in Sleep Medicine from the ESRS (European Sleep Research Society). Master's Degree in Epilepsy from the University of Murcia. Training in Childhood EEG-Epilepsy and Sleep Epilepsy at the ILAE (The International League Against Epilepsy. Virtual Epilepsy Academy). Training course and postgraduate diploma in Sleep Medicine from the Spanish Committee of Accreditation in Sleep Medicine (CEAMS)
- ♦ Member of the Spanish Society of Sleep (SES), European Society of Sleep (ESRS), American Association of Sleep Medicine (AASM) and the American Association of Epilepsy (AES)

Dr. Herrero San Martín, Alejandro

- ♦ Faculty specialist in 12 de Octubre Hospital and Neurologist assigned to the multidisciplinary sleep unit, 12 de Octubre Hospital
- ♦ Collaborator in UCM teaching practice
- ♦ Master's Degree in Sleep: Physiology and Medicine. University of Murcia
- ♦ Training course and postgraduate diploma in Sleep Medicine from the Spanish Committee of Accreditation in Sleep Medicine (CEAMS)
- ♦ Member of the Spanish Society of Neurology (SEN) and the Spanish Society of Sleep (SES)

Dr. Sánchez del Río, Margarita

- ♦ Clinical Collaborator in Neurology, monographic consultations in headaches, at Navarra Clinical University, Madrid Campus
- ♦ Associate Professor at University of Navarra
- ♦ Neurology Specialist at Jiménez Díaz Foundation University Hospital in Madrid
- ♦ Clinical-Research Fellow in Headaches Jefferson Headache Center. Thomas Jefferson University Hospital. Philadelphia Research Fellow in Migraines Stroke and Neurovascular Regulation Laboratory. Department of Neurology. Massachusetts General Hospital. Harvard Medical School. Boston
- ♦ Member of the executive committee of the European Headache Federation (EHF) and the International Headache Society Committee (IHS); member of the ad hoc committee of the headache study group (SEN)

Dr. Gómez Ibáñez, Asier

- ♦ Clinical collaborator in the Neurology Department Navarra University Clinic. Madrid (Spain)
- ♦ Associate Professor. Faculty of Medicine. Navarra University. Pamplona (Spain)
- ♦ Clinical Fellow EEG/Epilepsy Program. University Hospital. London Health Science Centre (LHSC). Western University. London (Canada)
- ♦ Specialist in Neurology from the Clinical University of Navarra
- ♦ Specific technical training in EEG and Video-EEG Spanish Society of Neurology Diplomate in EEG (Canadian Society of Clinical Neurophysiologists)
- ♦ Member of the Spanish Society of Neurology, Spanish Society of Epilepsy and the American Epilepsy Society

Dr. Petanès Argemí, Joan

- ♦ Attending Neuro-Pediatrician in Pediatric Medicine Services of the Corporació Sanitària Parc Taulí Hospital in Sabadell
- ♦ Neuro-Pediatrician in Sant Joan de Deú Hospital, Barcelona

Dr. Miguélez González, María

- ♦ Endocrinology and Nutrition Jiménez Díaz Foundation Madrid

Dr. López García, Raquel

- ♦ Specialist in Clinical Neurophysiology in the multidisciplinary unit of sleep disorders at the Castellón General Hospital
- ♦ Master's Degree in Pediatric Neurology and Neurodevelopment. CEU Cardenal Herrera University
- ♦ Master's Degree in Sleep: Physiology and Medicine. University of Murcia.
- ♦ European Specialist in Sleep Medicine. Accredited by the European Sleep Research Society (ESRS)
- ♦ Member of the European Society of Sleep Medicine
- ♦ Member of the Spanish Society of Sleep
- ♦ Member of the Spanish Society of Clinical Neurophysiology

Mr. Mercadé Canals, Oriol

- ♦ London Clinical Health Unit. In his private practice he treats both athletes and people with sleep problems.
- ♦ Member of the sleep specialists team at AdSalutem
- ♦ Psychologist in the Catalan Padel Federation
- ♦ For 10 years, has been a member of Dr. Estivill's team and has coordinated the Sleep Unit at QMS (Quality Medical Services)
- ♦ Advisor to clubs in different sports, both formative and professional
- ♦ Degree in Psychology
- ♦ Master's Degree in Sport Psychology (UAB)
- ♦ Master's Degree in Sleep Medicine and Physiology (UPO)
- ♦ Specializations in EMDR, Hypnosis, Coaching, Mindfulness, Biofeedback and Neurofeedback, among others



“

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

05

Structure and Content

The structure of the syllabus has been designed by a team of professionals with knowledge of the implications of medical preparation, who are aware of the relevance of the up-to-date specialization, and are committed to quality teaching using new educational technologies.





“

A comprehensive teaching program, structured in well-developed teaching units, oriented towards efficient and swift learning”

Module 1. Previous Fundamental Aspects of Sleep Medicine

- 1.1. Normal Sleep in Humans. Sleep Functions
- 1.2. Evolution of Sleep Throughout a Lifetime
- 1.3. The Neurobiology of Sleep and Wakefulness
- 1.4. Neurobiology Mechanisms of Sleep and Wakefulness
- 1.5. Chronobiology of the Sleep-Wake Cycle
- 1.6. Evolution of Circadian System Throughout a Lifetime
- 1.7. Dream Activity
- 1.8. Commonly Used Drugs Which Interfere With Sleep
- 1.9. Sleep Disorders. From the Anamnesis to the Suspected Diagnosis
 - 1.9.1. Introduction. Classification of ICSD Sleep Disorders
 - 1.9.2. Anamnesis and Basic Semiology
 - 1.9.3. Medical History. Sleep Diary. Scales and Test
 - 1.9.4. Suspected Diagnosis. General Tests and Sleep Specific Tests

Module 2. Technical and Organizational Aspects of the Diagnostic Process

- 2.1. Measurable Biological Parameters and Detection Sensors
 - 2.1.1. Types of Parameters and Their Registration Methods
 - 2.1.2. Selection of Parameters According to Diagnostic Suspicion
 - 2.1.3. General Protocol and the Selection of Which Test to Perform
- 2.2. Simplified Systems of Registration
 - 2.2.1. Relevance of the Simplified Systems
 - 2.2.2. Pulse Oximetry, Actigraphy and Activity Wristbands
 - 2.2.3. Abbreviated Systems and Respiratory Polygraphy
- 2.3. Polysomnography (PSG): The Apparatus and Signal Acquisition
- 2.4. Polysomnography (PSG): Analysis, Coding and Interpretation (I)
 - 2.4.1. Analysis and Coding of the Sleep Phases in Adults. Hypnogram
 - 2.4.2. Analysis and Coding of the Sleep Phases in Childhood
 - 2.4.3. Analysis and Coding of Cardiac Activity
- 2.5. Polysomnography (PSG): Analysis, Coding and Interpretation (II)
 - 2.5.1. Coding of Respiratory Events and Their Interpretation
 - 2.5.2. Analysis and Coding of Motor Events
 - 2.5.3. Analysis of Other Signs
 - 2.5.4. Joint Interpretation and Reporting





- 2.6. Polysomnography (PSG): Indications and Expanded PSG
- 2.7. Other Sleep and Wakefulness Tests
 - 2.7.1. Evaluation of Tiredness
 - 2.7.1.1. Multiple Latency Sleep Test- MLST
 - 2.7.1.2. Maintenance of Wakefulness Test - MWT
 - 2.7.2. Suggested Immobilisation Test (SIT) and Variants (mSIT)
- 2.8. Alternative Systems of Integrated Monitoring
 - 2.8.1. Other Ways to Address Sleep Disorders
 - 2.8.2. Wireless Systems
 - 2.8.3. Pulse Transit Time (PTT) Systems
 - 2.8.4. Microwave Movement Sensors
 - 2.8.5. Image and Sound in Sleep Studies
- 2.9. Methods of Studying the Circadian System
- 2.10. Automated and Advanced Analysis of the Bioelectric Signal
 - 2.10.1. Concepts, Preparation and Analysis
 - 2.10.2. Analysis of Each Signal or Multichannel
 - 2.10.3. Algorithms for Cleaning, Artefact Detection and Detection of Specific Signals
 - 2.10.4. Learning and Classification Networks, Analytics Matching and Data Mining
- 2.11. Organization of a Sleep Unit
 - 2.11.1. From Basic Units to Multidisciplinary Units. Local, Multidisciplinary and Multi-Sectoral Integration
 - 2.11.2. The Patient as a Central Focus
 - 2.11.3. Sleep Nursing
 - 2.11.4. External Integration with Health Services and Support Units
 - 2.11.5. Supply Companies and Private Activity
 - 2.11.6. Accreditations for Centers and People
 - 2.11.7. Innovation and Resources. Integration of Software, Networks and Servers. Home-Based Monitoring Systems

Module 3. Insomnia in Adults. Sleep in Adult Psychiatry

- 3.1. Insomnia: Definitions, Types, Epidemiology and the Socio-Economic Impact
- 3.2. Etiopathogenesis, Assessment and Differential Diagnosis of Chronic Insomnia
- 3.3. Non-Pharmacological Management of Chronic Insomnia(I): Situating the Problem and its Orientation
 - 3.3.1. Basis and Importance of a Non-Pharmacological Approach to Insomnia
 - 3.3.2. Cognitive-Behavioural Treatment of Insomnia. Conceptual Framework
 - 3.3.3. Components of Cognitive-Behavioural Treatment
 - 3.3.3.1. Stimulus Control Techniques
 - 3.3.3.2. Techniques to Reduce the Amount of Time Spent in Bed
 - 3.3.3.3. Sleep Hygiene Rules: Environmental and Behavioural Changes
 - 3.3.3.4. Effective Relaxation Techniques for Insomnia
 - 3.3.3.5. Cognitive Techniques Applied in Managing Insomnia
 - 3.3.4. Other Possible Non-Pharmacological Approaches
 - 3.3.4.1. Aromatherapy in Sleep Problems: Myths and Truths
 - 3.3.4.2. Music Therapy for Insomnia
 - 3.3.4.3. Acupuncture for Insomnia
- 3.4. Non-Pharmacological Management of Chronic Insomnia(II): Behavioral Techniques
 - 3.4.1. Step-by-Step Relaxation Technique
 - 3.4.1.1. Relaxation and Diaphragm Respiration Techniques
 - 3.4.1.2. Progressive Muscular Relaxation Training
 - 3.4.1.3. Other Techniques: Biofeedback and Mindfulness
 - 3.4.2. Procedure for Applying the Cognitive Techniques
 - 3.4.2.1. Negative Thoughts and Their Impact on Sleep
 - 3.4.2.2. Cognitive Distortions
 - 3.4.2.3. Cognitive Reconstruction: Debate Technique
 - 3.4.2.4. Thought Stop
 - 3.4.2.5. Paradoxical Intention
 - 3.4.3. Individual vs. Group Therapy
 - 3.4.4. Health Education in the Prevention of Insomnia
 - 3.4.5. Neurofeedback and Insomnia: Basic and Applied Research

- 3.5. Pharmacological Treatment for Insomnia: Options and Latest Findings
 - 3.5.1. Benzodiazepines (BZD)
 - 3.5.2. Non-Benzodiazepine Hypnotics ("Z-drugs")
 - 3.5.3. Antidepressive Sedatives
 - 3.5.4. Melatonin and Melatonin Receptor Agonists
 - 3.5.5. Dual Orexin Receptor Antagonists (DORA): What Does the Future Hold?
 - 3.5.6. Other Drugs Useful in Treating Insomnia
 - 3.5.7. Supplements and Phytotherapy: Myths and Scientific Evidence
- 3.6. Planning the Pharmacological Treatment of Insomnia. Special Situations
- 3.7. Mood Disorders and Sleep
- 3.8. Anxiety Disorders and Sleep
- 3.9. Other Psychiatric Disorders and Sleep
 - 3.9.1. Psychotic Disorders
 - 3.9.2. Eating Disorders
 - 3.9.3. ADHD in Adults
- 3.10. Sleep and Addictions

Module 4. Hypersomnia in Adults. Circadian Rhythm Disorders in Adults

- 4.1. Initial Approach to Hypersomnias of Central Origin
 - 4.1.1. Concepts, Definitions and Types
 - 4.1.2. Insufficient Sleep Syndrome
 - 4.1.3. Isolated Symptoms and Variants of Normality: Long Sleeper
- 4.2. Narcolepsy (Part I)
- 4.3. Narcolepsy (Part II)
- 4.4. Idiopathic Hypersomnia
- 4.5. Recurrent Hypersomnia
 - 4.5.1. Kleine Levin Syndrome
 - 4.5.2. Hypersomnia Related to Menstruation
- 4.6. Other Causes of Hypersomnia
- 4.7. Chronopathology (I): Endogenous Circadian Disturbances
 - 4.7.1. Delayed Sleep Phase Syndrome
 - 4.7.2. Advanced Sleep Phase Syndrome
 - 4.7.3. Hypnictameral or Free-Course Syndrome
 - 4.7.4. Irregular Wake-Sleep Pattern

- 4.8. Chronopathology (II): External Factors in Circadian Alterations
 - 4.8.1. Circadian Alterations Due to Shift Work Patterns
 - 4.8.2. Circadian Disturbance Due to Fast Meridian Crossing or Jet Lag
 - 4.8.3. Social Jet Lag
- 4.9. Phototherapy
- 4.10. Other Therapeutic Methods to Regulate the Circadian System
 - 4.10.1. Sleep Hygiene Rules
 - 4.10.2. Chronotherapy
 - 4.10.3. Melatonin
 - 4.10.4. Other Drugs

Module 5. Sleep Disordered Breathing (RBD): Clinical Aspects in Adults

- 5.1. Respiratory Physiology and Pathophysiology During Sleep
 - 5.1.1. Introduction
 - 5.1.2. Anatomical Factors
 - 5.1.3. Functional Factors
 - 5.1.3.1. Upper Airway Reflexes (UAR). Answers
 - 5.1.3.2. Degree of Sensitivity of the Centers to Triggering Events
 - 5.1.3.3. Sensitivity of the Respiratory Center
 - 5.1.4. Assessment of Features Involved in ASV Characteristics in SAHS
 - 5.1.4.1. Known Features
 - 5.1.4.2. Critical Pressure Measurement as an Expression of ASV Collapsibility
- 5.2. Characteristics of the Most Typical TRS: Breathing Sounds, SARVAS, SAHS
 - 5.2.1. Snoring. Definition, Classification and Epidemiology
 - 5.2.2. Catathrenia
 - 5.2.3. Syndrome of Increased Upper Airway Resistance (SARVAS)
 - 5.2.4. Sleep Apnoea-Hypopnoea Syndrome (SAHS)
 - 5.2.4.1. Definition and Concept
 - 5.2.4.2. Prevalence
 - 5.2.4.3. Risk Factors
- 5.3. Central Apnoea Syndrome
- 5.4. Non-respiratory Comorbidities of SAHS
 - 5.4.1. AHT and Cardiovascular Risk
 - 5.4.2. Other Comorbidities
- 5.5. Respiratory Comorbidities of SAHS
 - 5.5.1. Acute Chronic Obstructive Pulmonary Disease (COPD)
 - 5.5.2. Asthma
 - 5.5.3. Diffuse Interstitial Lung Disease
 - 5.5.4. Pulmonary Hypertension
- 5.6. SAHS, Obesity and Metabolic Disturbances: Associations and Effect of CPAP
 - 5.6.1. SAHS and Metabolic Syndrome
 - 5.6.2. SAHS and Lipid Metabolism
 - 5.6.3. SAHS and Glucide Metabolism
- 5.7. Hypoventilation-Obesity Syndrome
 - 5.7.1. Definition, Prevalance and Epidemiology
 - 5.7.2. Effects of Obesity on the Respiratory System
 - 5.7.3. Contribution of Airway Obstruction During Sleep to Hypercapnia
 - 5.7.4. Clinical Features, Predictive Factors and Diagnosis
 - 5.7.5. Treatment
- 5.8. Diagnosis of SAHS
 - 5.8.1. Polysomnography: "Gold Standard" Method
 - 5.8.2. Polygraphy and Simplified Diagnostic Methods. Indications and Decision Making
 - 5.8.3. Other Complimentary Methods
- 5.9. Treatment of SAHS (I)
 - 5.9.1. Global Measures
 - 5.9.2. Positive Pressure in the Airway. CPAP and APAP Indication
 - 5.9.3. Adaptation and Monitoring of Treatment. The Age of Telemonitoring
- 5.10. Treatment of SAHS (II)
 - 5.10.1. Treatment with Bi-Level Pressure
 - 5.10.2. Servo Ventilation
 - 5.10.3. Other Therapeutic Options

Module 6. Sleep-Related Breathing Disorders: Surgery, Dentistry and Functional Rehabilitation in SAHS

- 6.1. Functional Anatomy and Exploration of the Airway from Surgical and Dental Perspectives
 - 6.1.1. Exploration of the Airway in the Otorhinolaryngological Practice
 - 6.1.2. Dental and Maxillofacial Exploration
- 6.2. Airway Imaging Tests
 - 6.2.1. Somnoscopy (DISE) in Pediatrics and Adults
 - 6.2.2. Applied Radiology
- 6.3. Surgery and Treatment
 - 6.3.1. Tonsillectomy, Adenoidectomy and Pharyngoplasty: Concepts and Techniques
 - 6.3.2. Lingual Frenulum Surgery
 - 6.3.3. Soft Tissue Stiffness Augmentation Techniques
 - 6.3.3.1. Radiofrequency
 - 6.3.3.2. Sclerosants
 - 6.3.3.3. Devices
 - 6.3.4. Hypopharyngeal Surgery
 - 6.3.4.1. Surgery of the Base of the Tongue and Epiglottis
 - 6.3.4.2. Other Treatment Techniques from a Cervical Approach
 - 6.3.4.2.1 Tongue and Hyoid Suspension
 - 6.3.4.2.2 Neurostimulation of the Hypoglossal Nerve
 - 6.3.4.2.3 Tracheostomy
 - 6.3.5. Nasal Surgery. Optimising Adherence to CPAP
 - 6.3.6. Oro-Dental Sleep Medicine (I): Mandibular Advancement Devices in Adults
 - 6.3.7. Oro-Dental Sleep Medicine (II): Expanders in Pediatrics and Adults
 - 6.3.8. Maxillary-Mandibular Advancement and Other Orthognathic Surgery Treatments
 - 6.3.9. Myofunctional Therapy and Respiratory Reeducation in the Treatment of SHAS
 - 6.3.10. Multilevel and Multidisciplinary Treatment Conclusions

Module 7. Behavioural and Movement Disorders During Sleep in Adults

- 7.1. Parasomnias During Adult NREM Sleep
 - 7.1.1. Circadian Rhythm Disorders in Adults
 - 7.1.2. Nocturnal Eating Disorder
 - 7.1.3. Sexomnia
- 7.2. REM Sleep Behaviour Disorder (RBD)
- 7.3. Other Sleep Disorders or Behavioural Situations
 - 7.3.1. Other REM Parasomnias
 - 7.3.1.1. Nightmare Disorder
 - 7.3.1.2. Isolated Sleep Paralysis
 - 7.3.2. Somniloquy
 - 7.3.3. Explosive Head Syndrome
- 7.4. Sleep-Wake Disassociation
 - 7.4.1. The Concept of Sleep-Wake Disassociation
 - 7.4.2. Status Dissociatus
- 7.5. Restless Leg Syndrome (Willis-Ekbom's Disease): Initial Considerations and Causal Mechanisms
 - 7.5.1. Definitions and Myths About the Disease: Clarifying Concepts
 - 7.5.2. Epidemiology
 - 7.5.3. Living with the Disease
 - 7.5.4. Pathophysiology
- 7.6. Restless Leg Syndrome: Etiopathogenic Types and Clinical Aspects
 - 7.6.1. "Primary" and "Secondary" Disease: Concept
 - 7.6.2. Clinical Symptoms
 - 7.6.3. Physical, Psychological and Social Consequences

- 7.7. Restless Leg Syndrome: Diagnostic Methods and Differential Diagnosis
 - 7.7.1. Clinical Diagnostic Criteria
 - 7.7.2. Complementary Methods of Diagnostic Support
 - 7.7.3. Differential Diagnosis
- 7.8. Treatment of Restless Leg Syndrome
 - 7.8.1. Non-Pharmacological Methods
 - 7.8.2. Iron Treatment. Other Deficits to Consider
 - 7.8.3. The Pharmacological Treatment of Symptoms
 - 7.8.3.1. General Considerations
 - 7.8.3.2. Dopaminergic Drugs
 - 7.8.3.3. Non-Dopaminergic Drugs
 - 7.8.4. Other Treatments
- 7.9. Other Motor Disorders Related to Sleep: Limb and/or Body Activity
 - 7.9.1. Periodic Limb Movement Syndrome During Sleep
 - 7.9.2. Rhythmic Movements During Sleep
 - 7.9.3. Muscular Cramps in the Legs During Sleep
 - 7.9.4. Hypnogenic Foot Tremor
 - 7.9.5. Alternating Leg Muscle Activation
 - 7.9.6. Hypnagogic Myoclonias
 - 7.9.7. Isolated Myoclonias in the Head and Neck During Sleep
 - 7.9.8. Prospinal Myoclonias
- 7.10. Other Motor Disorders Related to Sleep: Orofacial Phenomena
 - 7.10.1. Bruxism During Sleep
 - 7.10.2. Faciomandibular Myoclonias

Module 8. Neurological Disorders Related to Sleep in Adults

- 8.1. Sleep, Learning and Memory
 - 8.1.1. Short-Term and Long-Term Memory Consolidation During Sleep
 - 8.1.2. Synaptic Homeostasis
 - 8.1.3. Hypnotoxins and the Glymphatic System During Sleep
 - 8.1.4. Aging, Memory and Sleep
- 8.2. Processing of Information and Sleep
 - 8.2.1. Sensory Processing
 - 8.2.2. Motor Control During Sleep
- 8.3. Neurodegeneration and Sleep (I): Alzheimer's Disease (AD)
 - 8.3.1. Pathophysiology of AD and the Glymphatic System
 - 8.3.2. Circadian Disorders in AD
 - 8.3.3. Therapeutic Management of Sleep Disorders in AD
- 8.4. Neurodegeneration and Sleep (II): REM Sleep Behaviour Disorder and Alpha-Synucleopathies
- 8.5. Neurodegeneration and Sleep (III): Other Degenerative Diseases
 - 8.5.1. Sleep Disorders in Frontotemporal Dementia
 - 8.5.2. Sleep Disorders in Huntington's Disease
 - 8.5.3. Sleep Disorders in Other Neurodegenerative Processes
- 8.6. Neurological Autoimmune Diseases and Sleep Disorders
 - 8.6.1. Multiple Sclerosis: Sleep and Fatigue
 - 8.6.2. Other Demyelinating Diseases and Sleep Disorders
 - 8.6.3. Autoimmune Encephalitis and Sleep
 - 8.6.4. Anti-IGLON 5 disease
- 8.7. Neuromuscular Diseases and Sleep
 - 8.7.1. Amyotrophic Lateral Sclerosis and Other Motor Neuron Diseases
 - 8.7.2. Myopathies and Sleep Disorders
- 8.8. Headaches and Sleep
 - 8.8.1. Relationship Between Sleep and Headaches
 - 8.8.2. Hypnic Headaches
 - 8.8.3. Migraines and Sleep

- 8.9. Epilepsy and Sleep (Author: Dr. Asier Gómez Ibañez)
- 8.10. Other Neurological Diseases and Their Relationship with Sleep
 - 8.10.1. Cerebrovascular Disease and Sleep
 - 8.10.2. Head Trauma, Concussion and Sleep
 - 8.10.3. Peripheral Nervous System Diseases and Sleep

Module 9. Sleep-Wake Disorders in Childhood

- 9.1. Organization and Ontogeny of Sleep in Childhood
 - 9.1.1. Differential Concepts in Sleep Architecture
 - 9.1.2. Sleep in Childhood and Adolescence
- 9.2. Predominant Sleep Onset Difficulties in Pediatrics
 - 9.2.1. Pediatric Insomnia
 - 9.2.2. Delayed Sleep Phase Syndrome
 - 9.2.3. Restless Leg Syndrome (Willis-Ekbom's Disease) in Pediatrics
- 9.3. Respiratory Disorders During Sleep (TRS) in Pediatrics
 - 9.3.1. Concepts and Types of TRS in the Pediatrics Age Group
 - 9.3.2. Pathophysiology of TRS in Children
 - 9.3.3. Consequences of Untreated TRS in Children
 - 9.3.4. Diagnosis of TRS in Children
 - 9.3.5. Treatment of TRS in Children
- 9.4. Parasomnias in the Pediatric Age Group
 - 9.4.1. Parasomnias of NREM Sleep
 - 9.4.2. Parasomnias of REM Sleep
- 9.5. Rhythmic Disorders During Sleep: A Problem Almost Exclusively Found in Pediatric Patients
- 9.6. Excessive Secondary Daily Tiredness in Pediatrics. Chronic Sleep Deprivation
- 9.7. Excessive Daytime Tiredness of Primary or Central Origin: Pediatric Issues
 - 9.7.1. Narcolepsy
 - 9.7.2. Kleine - Levin syndrome

- 9.8. Specific Pediatric Pathologies and Sleep
 - 9.8.1. Asthma
 - 9.8.2. Allergies
 - 9.8.3. Coeliac Disease
 - 9.8.4. Childhood Diabetes
 - 9.8.5. Nocturnal Gastro-Esophageal Reflux in Pediatrics
 - 9.8.6. Cystic Fibrosis
 - 9.8.7. Attention Deficit Hyperactivity Disorder (TDAH)
 - 9.8.8. Autism Spectrum Disorder (TEA)
 - 9.8.9. Prader - Willi Syndrome
 - 9.8.10. Down Syndrome
- 9.9. Sleep Disorder Diagnostic Techniques in Pediatrics
 - 9.9.1. Sleep Diary
 - 9.9.2. Paediatric Actigraphy
 - 9.9.3. Pediatric Nocturnal Video-Polysomnography
 - 9.9.4. Multiple Latency Test in Pediatrics

Module 10. Sleep in Other Medical and Social Situations. Sleep and Health

- 10.1. Sleep and Cardiovascular Health
- 10.2. Sleep and Endocrine-Metabolic Changes. Diet and Sleep
- 10.3. Sleep and Digestive Changes
- 10.4. Sleep and Pain
- 10.5. Sleep and Cancer
- 10.6. Sleep in Women. Sleep at an Older Age
- 10.7. Sleep in Special Life Situations
 - 10.7.1. Sleep in Isolation and Confinement
 - 10.7.2. Sleep in Hospital Patients
 - 10.7.3. Sleep at High Altitude
 - 10.7.4. Sleep in Aviation and Outer Space
- 10.8. Sleep and Sport
- 10.9. Sleep and Occupational and Academic Health



06

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.



“

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. Physiotherapists/kinesiologists 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 of professional physiotherapy 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. Physiotherapists/kinesiologists 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 physiotherapist/kinesiologist 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.



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.

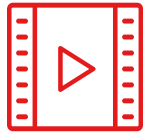
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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 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

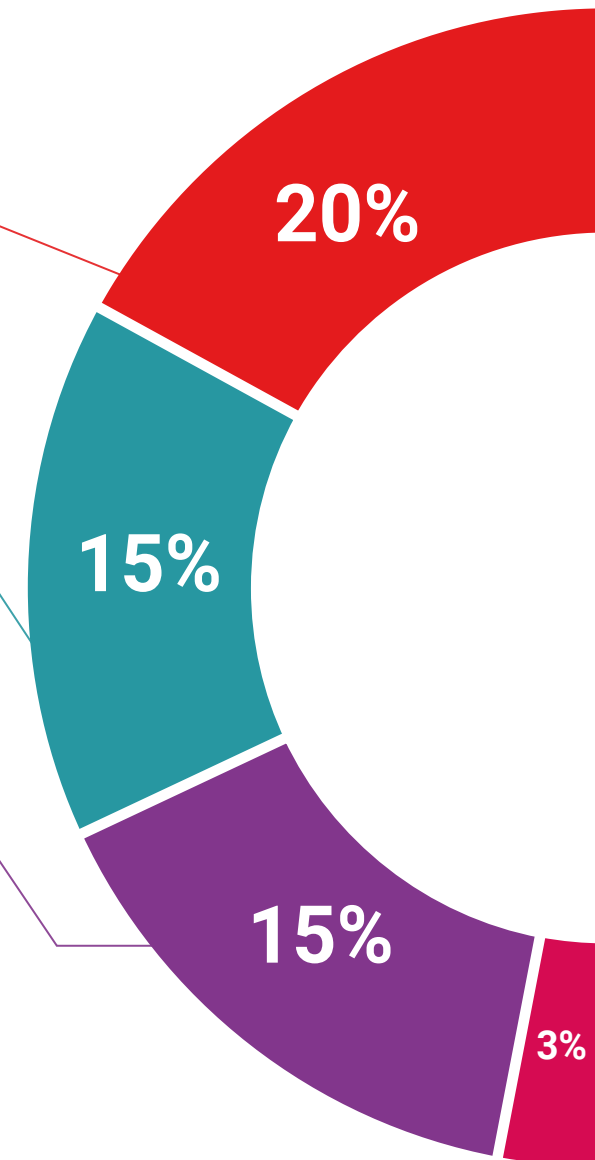
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

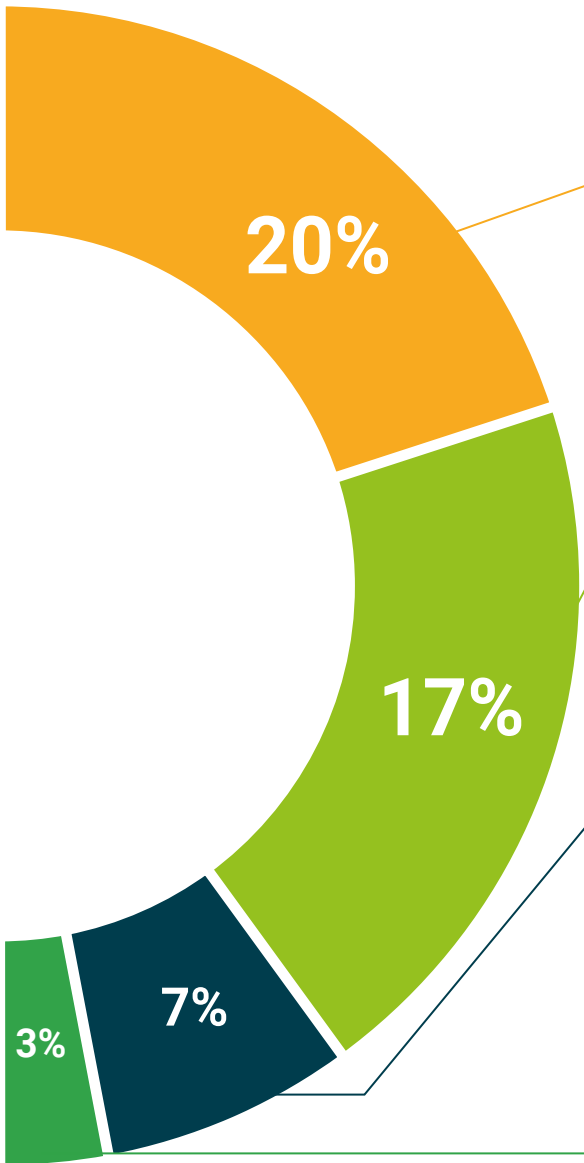
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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

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.



07 Certificate

The Professional Master's Degree in Sleep Medicine guarantees students, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Global University.



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”

This program will allow you to obtain your **Professional Master's Degree diploma in Sleep Medicine** 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.

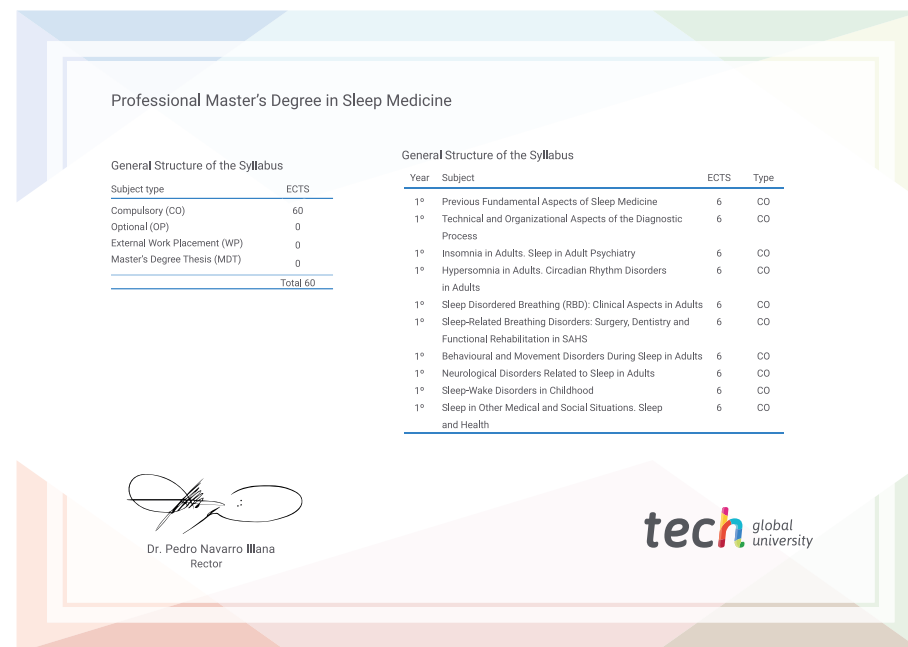
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Professional Master's Degree in Sleep Medicine**

Modality: **online**

Duration: **12 months**

Accreditation: **60 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.



Professional Master's Degree Sleep Medicine

- › Modality: online
- › Duration: 12 months
- › Certificate: TECH Global University
- › Credits: 60 ECTS
- › Schedule: at your own pace
- › Exams: online

Professional Master's Degree

Sleep Medicine

