

Hybrid Professional Master's Degree

Pediatric Orthopedics





Hybrid Professional Master's Degree

Pediatric Orthopedics

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

Website: www.techtute.com/us/physiotherapy/hybrid-professional-master-degree/hybrid-professional-master-degree-pediatric-orthopedics

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01

Introduction

Pediatric Orthopedics has undergone significant advances in recent years, including the use of less invasive surgical techniques and the use of more advanced medical devices. Such progress is relevant for physiotherapists, as it gives them the opportunity to provide more effective and personalized treatment for children with orthopedic conditions. For this reason, TECH has designed this program that perfectly combines a 100% online theoretical framework with a first class internship in a distinguished clinical center. In this way, the professional will be able to carry out a complete update in this field through an academic option that responds to their real needs for updating.





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A Hybrid Professional Master's Degree that will take you in just 12 months to achieve an effective update in Pediatric Orthopedics"

Thanks to advances in technology and medical research, physical therapy professionals can offer effective and personalized solutions to musculoskeletal problems in children and adolescents. Therefore, pediatric orthopedics covers a wide range of pathologies, from scoliosis to rheumatic diseases, including congenital malformations and traumatic injuries.

Updating knowledge in this field has become essential for physical therapists who wish to offer a complete and effective treatment to their pediatric patients. For this reason, this Hybrid Professional Master's Degree in Pediatric Orthopedics of TECH is born, which offers a complete update in this specialty, with innovative pedagogical tools and an internship of 3 weeks in a first level health center.

A program includes topics such as evaluation of the pediatric patient, treatment of the most common orthopedic pathologies, application of advanced technologies in rehabilitation and injury prevention. In addition, the students will have the opportunity to have an effective update with experts in this field and to apply the theoretical framework addressed in a real clinical setting.

Undoubtedly, this academic institution offers a perfect opportunity for a comprehensive update through an unparalleled and flexible academic option that adapts to the real needs of updating physical therapists.



Take a step forward in your professional career and incorporate the most relevant technical advances in the care of children with muscular dystrophies"

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

- ♦ Development of more than 100 cases presented by physiotherapy professionals who are experts in approaching minor patients requiring pediatric orthopedics
- ♦ Its graphic, schematic and practical contents provide scientific and assistance information on those medical disciplines that are essential for professional practice
- ♦ Patient assessment and integration of the latest recommendations for successful integration of therapeutic procedures
- ♦ Comprehensive systematized action plans for the main pathologies
- ♦ Presentation of practical workshops on diagnostic techniques
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Approach to the different lesions according to the characteristics of the population
- ♦ With a special emphasis on evidence-based medicine and research methods in patient recovery
- ♦ All of this will be complemented by 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
- ♦ In addition, you will be able to do a clinical internship in one of the best clinical and rehabilitation centers in the world

“*Improve the quality of life of children with motor disabilities through this Hybrid Professional Master's Degree in Pediatric Orthopedics*”

In this proposal for a Hybrid Professional Master's Degree, of a professionalizing nature and online format, the program is aimed at updating physiotherapist who perform their functions in intensive care units, and who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a educational way to integrate practice, and the theoretical-practical elements will facilitate the updating of knowledge and will allow decision making in the patient management.

Thanks to their multimedia content developed with the latest educational technology, they will allow the physiotherapy professional to obtain situated and contextual learning, which means a simulated environment that will provide immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Get a complete update on the most innovative techniques for the treatment of orthopedic injuries in children through this university program.

With this program you will be up to date on the techniques used to treat pediatric patients with syndromic diseases.



02

Why Study this Hybrid Professional Master's Degree?

Currently, pediatric orthopedics has become one of the most demanded specialties in the field of physical therapy. In view of the growing demand, this Hybrid Professional Master's Degree in Pediatric Orthopedics from TECH offers a practical update in this field, aimed at professionals who seek to be up to date in diagnostic and therapeutic advances. Therefore, through this program, graduates will be able to enhance their theoretical and practical skills in the treatment of orthopedic conditions in children, while enjoying an internship in a recognized clinical center with expert tutors for 3 weeks. A unique opportunity to improve the quality of life of children by updating their knowledge with real experts.





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TECH gives you a unique opportunity to gain access to a renowned healthcare center and face the most complex challenges in the treatment of orthopedic conditions”

1. Updating from the Latest Technology Available

Nowadays, advances in technology have had a great impact on the field of physiotherapy, making it possible to improve the effectiveness of treatments and reduce the recovery time of patients. As a physical therapy professional specializing in pediatric orthopedics, it is important to be up to date on the latest technological advances. This program gives you the opportunity to integrate the latest techniques in the various types of treatments.

2. Gaining In-depth Knowledge from the Experience of Top Specialists

Physiotherapists who decide to take the Hybrid Professional Master's Degree in Pediatric Orthopedics will have access to a team of highly qualified specialists in the theoretical and clinical practice phase. In addition, faculty will be available to answer any questions about the program. Likewise, during their internship in a renowned clinical center, graduates will be guided by experts in Physiotherapy, which will allow them to incorporate the latest methodologies and diagnostic and therapeutic procedures in their practice. An enriching experience that will significantly enhance the skills and experience of professionals in the field of Pediatric Orthopedics.

3. Entering First-Class Clinical Environments

TECH carefully selects the internship program centers available to its graduates, ensuring that they have access to first-rate clinical facilities in the field of physical therapy. In these healthcare environments, advanced therapeutic techniques are applied, which will allow them to experience first-hand the most rigorous and exhaustive methods, always based on the latest scientific evidence. TECH ensures that graduates receive a quality practical update, allowing them to apply the theoretical knowledge acquired in the program with real patients, which translates into more effective and quality care.





4. Combining the Best Theory with State-of-the-Art Practice

This Hybrid Professional Master's Degree offers a perfect combination of theory and practice, designed especially for professionals who are looking to update their skills in the area of pediatric orthopedics. A program, which includes the realization of outstanding internships, allowing the professional to integrate all the concepts addressed in an optimal way in their daily practice. Undoubtedly, an excellent option for those who are looking for a complete update from the best teachers and experts in this field.

5. Expanding the Boundaries of Knowledge

TECH offers the possibility of carrying out the Internship Program not only in centers of national prestige, but also internationally. In this way, specialists can broaden their horizons and keep up to date with the best professionals who have developed their careers in first-class hospitals and clinical centers. A unique opportunity for physical therapists that only TECH, the world's largest digital university.



*You will have full practical immersion
at the center of your choice"*

03 Objectives

The main objective of this Hybrid Professional Master's Degree in Orthopedics for Children is to update knowledge and skills in the treatment and management of orthopedic pathologies in the child population. A program that will provide students with the necessary tools to identify, evaluate and treat orthopedic conditions in children, from a multidisciplinary approach and with a high degree of specialization. It also seeks to promote research and the development of new therapeutic techniques to improve the quality of life of pediatric patients and their families, through the most current information adapted to the latest trends and advances in this field.





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You will combine theory and professional practice through a demanding and rewarding educational approach"



General Objective

- This program is oriented to improve the necessary skills to manage the therapeutic options and the realization of a treatment schedule for orthopedic pathologies in children. In addition, students will be updated on the different surgical techniques used in the treatment of these pathologies. An ideal opportunity to update on the pathology, clinical presentation and management of the most frequent benign and malignant tumors of the upper extremity affecting children, as well as to recognize and manage the main diseases of the hip in children





Specific Objectives

Module 1. Child Orthopedics

- ◆ Perform a detailed anamnesis and a complete, orderly and systematic examination of pediatric patients
- ◆ Distinguish physiological from pathological development, as well as their radiological characteristics
- ◆ Learn the complementary tests and radiological characteristics of bone growth
- ◆ Learn the intricacies of the etiopathogenesis of deformities in the lower limb axis
- ◆ Anticipate and correct potential deformities
- ◆ Differentiate and know how to treat musculoskeletal pathologies associated with normal child development
- ◆ Apply the basics of fracture treatment in pediatric patients

Module 2. Upper Limb

- ◆ Delve into the knowledge of the origin and embryology of the different congenital malformations
- ◆ Become familiar with the different congenital malformations, studying etiopathogenesis, clinical studies, complementary studies, classifications and treatments of each pathology

Module 3. Hip

- ♦ Manage the diagnosis, examination and treatment of hip dysplasia, taking into account the different ages of children
- ♦ Delve into hip exploration, which is essential in neonatal screening
- ♦ Understand Perthes' disease with clear management ideas, differentiating between outdated treatments and new perspectives on the disease
- ♦ Early diagnosis of adolescent hip pathology, as it is crucial for its survival in adulthood, and learning how to manage it in an appropriate manner
- ♦ including complex reduction surgeries to reduce the size and shape of the
- ♦ Learn to recognize coxa vara and spring hip and assess their clinical implications for receiving proper treatment

Module 4. knee

- ♦ Learn to distinguish the clinical-radiological characteristics of patients with discoid meniscus
- ♦ Differentiate the types of discoid meniscus
- ♦ Perform a differential diagnosis of popliteal cysts
- ♦ Recognize the clinical, radiological and epidemiological features of Osgood-Schlatter disease
- ♦ Identify possible warning signs of Osgood-Schlatter disease
- ♦ Perform an adequate diagnosis of patellofemoral instabilities
- ♦ Learn the osteochondral lesions of children
- ♦ Delve into the implications of cruciate ligament rupture in children
- ♦ Manage fractures around the knee
- ♦ Differentiate between stable and unstable fractures for correct treatment

Module 5. Pathology of the Foot

- ♦ Gain in-depth knowledge of the etiopathogenesis of foot malformations and deformities
- ♦ Diagnose through anamnesis and physical examination
- ♦ Apply the complementary tests required for diagnosis, and primarily be able to assess and describe the radiographic images in the different pathologies
- ♦ Interpret when different diagnostic tests are appropriate
- ♦ Gain in-depth knowledge on treating each pathology. Learn the common techniques of manipulation and casting in the pediatric age, as well as the different surgical techniques required to treat each
- ♦ Learn the natural history and evolution of each process

Module 6. Spine

- ♦ Learn the characteristics of the different pathologies around the spine in pediatric patients
- ♦ Learn the most frequent causes of spine deformity
- ♦ Manage the urgency of pediatric patients with spinal pathology, torticollis, atlantoaxial instability
- ♦ Long-term management of patients diagnosed with spinal deformity in infancy
- ♦ Long-term management of patients diagnosed with tumors / fractures during infancy
- ♦ Suspect and learn the management of tumors such as osteoid osteoma, aneurysmal bone cyst, etc
- ♦ Perform the necessary tests to diagnose the different entities

Module 7. Orthopedic Alterations Linked to Neuromuscular Diseases

- ♦ Learn available knowledge on the prevention and management of hip dislocation
- ♦ Learn the management algorithms for each pathological gait pattern
- ♦ Make decisions using three-dimensional motion analysis
- ♦ Delve into surgical techniques by anatomical segments
- ♦ Learn the application of orthoses and rehabilitation after multilevel surgery

Module 8. Skeletal Dysplasias and Syndromic Diseases

- ♦ Specialize in the etiology and pathogenic theories of bone dysplasias and congenital malformations of the lower limbs
- ♦ Perform an accurate assessment of the different diagnostic tests
- ♦ Delve into the natural history and evolution expectancy of each process
- ♦ Gain in-depth knowledge of the different treatment methods and the best moment to carry them out, depending on the pathology

Module 9. Osteoarticular Infections

- ♦ Learn the microbiologic characteristics of the different infectious musculoskeletal pathologies in pediatric patients
- ♦ Delve into the most prevalent germs that cause infectious pathology
- ♦ Develop a correct strategy for the differential diagnosis of diseases that cause lameness in pediatric patients
- ♦ Learn the emergency management of pediatric patients with infectious musculoskeletal pathologies
- ♦ Gain in-depth knowledge on the hospital management of patients admitted for musculoskeletal infections
- ♦ Apply the long-term management of patients diagnosed with musculoskeletal infections during infancy
- ♦ Manage and identify other non-infectious arthropathies, as well as their management in pediatric patients
- ♦ Suspect and learn how to manage recurrent multifocal osteomyelitis

Module 10. Tumours

- ♦ Appropriately guide the diagnostic study of this lesion and, if a musculoskeletal biopsy is necessary, learn how to perform it
- ♦ Learn the latest up-to-date treatments for the main musculoskeletal injuries in children



Delve when and where you want into the latest treatments for major musculoskeletal injuries in pediatric patients"

04 Skills

The professional who attends this program will improve their ability to accurately identify and evaluate orthopedic conditions in children, as well as to apply the most effective techniques in their treatment. In addition, students will be able to delve into the most frequent pathologies, clinical presentation and management of the most frequent benign and malignant tumors of the upper extremity affecting children. All this through a first level theoretical-practical approach.



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The specialized team of this university program provides you with clinical case studies that will allow you to increase your capacity for action when dealing with patients with foot pathologies"



General Skills

- ♦ Review the most important pathologies that occur in pediatric orthopedics
- ♦ Advise patients and family members on the use and benefits of orthopedic products
- ♦ Apply learning to explore and diagnose knee pathologies in children, losing the usual fear generated in many specialists due to lack of knowledge of the pathology
- ♦ Recognize the different pathologies of children's feet and be able to make an accurate diagnosis together with a suitable therapeutic approach
- ♦ Describe the main aspects of spinal pathology in pediatric patients
- ♦ Review advances and update knowledge on the management of spinal pathologies in pediatric patients
- ♦ Develop the necessary skills to appropriately diagnose and treat pediatric patients with spinal diseases
- ♦ Learn the treatment by applying physiopathological principles
- ♦ Explore physical examinations integrated with three-dimensional movement analysis
- ♦ Manage functional and quality of life classifications and scales





Specific Skills

- ♦ To make a full differential diagnosis of a pathology as frequent as lameness in children
- ♦ Evaluate the possibilities of treating tumors affecting children's hands, including surgical treatment, resections, amputations and reconstructions
- ♦ Differentiate fractures and know how and when to treat them, as well as the surgical indications versus conservative treatment of fractures
- ♦ Delve into the diagnosis and early treatment of congenital knee dislocation
- ♦ Learn to interpret when different diagnostic tests are suitable
- ♦ Develop a correct strategy in the differential diagnosis of pathologies that cause spinal pain in pediatric patients
- ♦ Manage spasticity, locally and globally, as well as other movement disorders
- ♦ Perform a correct anamnesis, physical examination and interpretation of imaging and laboratory tests required for diagnosis
- ♦ Be able to perform the necessary tests to diagnose the different infectious entities
- ♦ Learn how to differentiate a lesion with aggressive clinical and radiological characteristics from a non-aggressive one

05

Course Management

TECH has selected an excellent teaching team with a consolidated trajectory in the field of Pediatric Orthopedics. Thanks to their high level of competence, the graduate will be able to access updated information according to their needs. In addition, the proximity of the teaching staff will allow you to resolve any questions you may have about the content of this 12-month program.





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Raise your professional profile as a physiotherapist, through our Hybrid Professional Master's Degree, developed by real experts in Pediatric Orthopedics"

Management



Dr. Palazón Quevedo, Ángel

- ♦ Head of the Orthopedic Surgery and Traumatology Service at the Hospital Universitario Niño Jesús. Madrid
- ♦ Medical Specialist at Clínica Santa Elena. Madrid
- ♦ Specialist Consultant at Hospital San Rafael. Madrid
- ♦ Collaborator with the Board of Directors of SECOT
- ♦ Doctoral course in Pediatrics with doctoral thesis project Long-term follow-up of surgically operated hip dysplasias in childhood.
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Medical Specialist COT via MIR at the University Hospital of San Juan de Alicante.
- ♦ Member of: SECOT and SEOP

Professors

Dr. Budke Neukamp, Marcelo

- ♦ Neurosurgery Specialist at Hospital Ruber Internacional
- ♦ Responsible for Epilepsy Surgery at the Hospital Universitario Infantil Niño Jesús
- ♦ Neurosurgeon at Hospital La Luz
- ♦ PhD in Surgery, Autonomous University of Madrid
- ♦ Bachelor's Degree in Medicine and Surgery from the School of Medicine of the Federal University of Pelotas. Estado de Rio Grande do Sul, Brazil
- ♦ Specialized in Neurosurgery at the Cleveland Clinic. United States
- ♦ Neurosurgeon at the Institut Mutualiste Montsouris. Paris, France
- ♦ Member of the Spanish Society of Neurosurgery and the Spanish Society of Pediatric Neurosurgery

Dr. Castañeda, Pablo G

- ♦ Chief of the Division of Pediatric Orthopaedic Surgery at Hassenfeld Children's Hospital at New York University
- ♦ Professor of Orthopaedic Surgery at New York University
- ♦ Medical Surgeon graduated from the Universidad Nacional Autonoma de Mexico through the Universidad Anahuac
- ♦ Specialized in Orthopedics and Traumatology from the National Autonomous University of Mexico
- ♦ Sub-specialty in Reconstructive Hip and Knee Surgery by the University of Oxford at the Nuffield Orthopaedic Centre. Oxford, England
- ♦ Sub-specialty in Pediatric Orthopedics from Baylor University. Houston, Texas, USA

Dr. Egea Gámez, Rosa María

- ◆ Specialist Physician of the Orthopedics and Traumatology Service at the Hospital Universitario Infantil Niño Jesús
- ◆ Specialist in Orthopedic Surgery and Traumatology at VU Medisch Centrum in Amsterdam
- ◆ Specialist in Orthopedic Surgery and Traumatology in Medisch Centrum Breda
- ◆ Spine Research Unit at the Nuffield Orthopaedic Centre in Oxford
- ◆ Specialist in Orthopedic Surgery and Traumatology at the Hospital General Universitario de Móstoles
- ◆ Specialist in Orthopedic Surgery and Traumatology at the Hospital Universitario Fundación de Alcorcón
- ◆ Specialist in Orthopedic Surgery and Traumatology at Mutua Gallega in Vigo
- ◆ Professor in Nursing and Physiotherapy at the Universidad Rey Juan Carlos
- ◆ Teaching abroad. Vrije Universiteit Amsterdam
- ◆ Professor at the Francisco de Vitoria University
- ◆ Degree in Medicine and Surgery from the Complutense University of Madrid
- ◆ PhD in Medicine, Universidad Rey Juan Carlos
- ◆ Professional Master's Degree in Public Health and Epidemiology at Universidad Rey Juan Carlos I, Madrid

Dr. Ramírez Barragán, Ana

- ◆ Assistant Physician of Traumatology and Orthopedic Surgery at the Hospital Infantil Universitario Niño Jesús
- ◆ Specialist in Family and Community Medicine
- ◆ Specialist in Traumatology and Orthopedic Surgery
- ◆ PhD in Medicine from the University of Salamanca
- ◆ Degree in Medicine and Surgery from the Complutense University of Madrid

Dr. Abad Lara, José Antonio

- ◆ Degree in Medicine and Surgery from the University of Córdoba
- ◆ Specialist in Pediatric Orthopedic Surgery and Traumatology, with exclusive dedication to the management of pediatric orthopedic conditions in the Pediatric Orthopedics Unit of the Hospital Universitario Reina Sofía
- ◆ Coordinator of the Children's Orthopedics Unit of the Hospital Universitario Reina Sofía until 2018

Dr. Abril Martín, Juan Carlos

- ◆ Head of the Pediatric Orthopedics Service at Ruber Internacional Hospital
- ◆ Medical Director of Traumatology and Orthopedics at Centro Clínico Betanzos
- ◆ Chief of Pediatric Orthopedics Service at Hospital Niño Jesús
- ◆ Medical Director of the Madrid Institute of Ozone Therapy
- ◆ Degree in Medicine and Surgery
- ◆ Specialty in Orthopedic and Traumatologic Surgery by the Fundación Jiménez Díaz

Dr. Clemente Garulo, Daniel

- ◆ Specialist in Rheumatology at the Pediatric Rheumatology Unit of the Hospital Infantil Universitario Niño Jesús
- ◆ Secretary of the working group: Rheumatic Diseases in Children and Adolescents of the Spanish Society of Rheumatology (ERNA-SER)
- ◆ Specialist Physician in Rheumatology at the Hospital Clínico San Carlos
- ◆ PhD in Health Sciences from the Universidad Camilo José Cela
- ◆ Degree in Medicine and Surgery from the Faculty of Medicine of the Universidad de Alcalá
- ◆ Member of the Spanish Society of Rheumatology
- ◆ Member of the Spanish Society of Pediatric Rheumatology

Dr. Alonso Hernández, Javier

- ♦ Medical specialist in Traumatology and Orthopedic Surgery
- ♦ Head of the Pediatric Traumatology and Orthopedics Unit at the CEMTRO Clinic in Madrid
- ♦ Assistant to the Pediatric Orthopedics Service of the Niño Jesús Hospital in Madrid
- ♦ Specialized in Pediatric Traumatology and Orthopedics and in Pediatric Sports Traumatology
- ♦ Degree in Medicine and Surgery from the UAM
- ♦ Specialist Physician in Family and Community Medicine via MIR
- ♦ Medical Specialist in Traumatology and Orthopedic Surgery via MIR
- ♦ Clinical internship at Bradford Royal Infirmary Bradford, England-United Kingdom
- ♦ Clinical internship at Johnston-Willis Hospital Richmond, Virginia-USA
- ♦ Clinical internship at Dudley Road Hospital, Birmingham, England-UK
- ♦ Award for the best clinical case (SOMACOT interhospital clinical session)

Dr. Álvaro Alonso, Alberto

- ♦ Coordinator of the Neuroorthopedics Clinic at the Hospital General Universitario Gregorio Marañón. Madrid
- ♦ Specialist in Traumatology and Orthopedic Surgery at the Gregorio Marañón General University Hospital. Madrid
- ♦ Degree in Medicine from the Complutense University of Madrid

Dr. Alves, Cristina

- ♦ Doctor at the Children's Orthopedic Surgical Unit of the Pediatric Hospital of Coimbra
- ♦ Attending physician at the Neurosurgery Unit of the Hospital Infantil Universitario Niño Jesús
- ♦ Orthopedic Physician in the Pediatric Orthopedic Service at the CHUC Pediatric Hospital, EPE

Dr. Cabello Blanco, Juan

- ♦ Pediatrician and Orthopedist at the Ruber Internacional Hospital
- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital Universitario La Paz
- ♦ Bachelor of Medicine from the Complutense University. Madrid
- ♦ Specialist in Traumatology and Pediatric Orthopedics

Dr. Salcedo Montejo, María

- ♦ Medical Specialist in Orthopedic Surgery and Traumatology
- ♦ Specialist in the Orthopedic Surgery and Traumatology Service, Children's Orthopedics Unit at the Hospital Universitario La Paz
- ♦ Member of the Multidisciplinary Unit of Skeletal Dysplasias at Hospital Universitario La Paz
- ♦ Degree in Medicine

Dr. Granado Llamas, Alberto

- ♦ Specialist in COT
- ♦ Specialist in Traumatology at MDH Medical Centers
- ♦ Co-author of several posters for the Congress of the Spanish Society of Orthopedic Surgery and Traumatology

Dr. Espinazo Arce, Olga

- ♦ Head of the Pediatric Orthopedics Section at the Basurto Hospital
- ♦ Doctor in the Children's Orthopedics Section of the Orthopedic Surgery and Traumatology Service of the Basurto Hospital
- ♦ Doctor in the Orthopedic Surgery and Traumatology Service of the Alto Deba Hospital
- ♦ Collaborator in Congresses organized by the Spanish Society of Pediatric Orthopedics
- ♦ Member of the Spanish Society of Pediatric Orthopedics

Dr. De Pablos Fernández, Julio

- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital de Navarra
- ♦ Associate Professor of Orthopedic Surgery and Traumatology at the Universidad de Navarra
- ♦ Associate Professor of Orthopedic Surgery and Traumatology at the Universidad de Navarra
- ♦ Editor of Pediatric Orthopedics in EFORT Orthopedic Reviews
- ♦ Member of the Editorial Board of Journal of Pediatric Orthopedic (JPO)
- ♦ Organizer of the International Seminar on Pediatric Orthopedics (Annual) for 23 editions
- ♦ Doctor of Medicine and Surgery from the University of Navarra. Outstanding Award
- ♦ Fellow in Pediatric Orthopaedic Surgery Alfred I DuPont Institute, Wilmington, Delaware USA
- ♦ Member of: SEOP, EPOS and POSNA

Dr. Garríguez Pérez, Daniel

- ♦ Medical Specialist in Orthopedics and Traumatology
- ♦ Orthopedic Surgeon and Traumatologist in the Hospital Clínico San Carlos
- ♦ Professional Master's Degree in Medicine, Universidad Autónoma de Madrid

Dr. García Fontecha , César Galo

- ♦ Member of the Pediatric Traumatology Unit of the Lenox Corachan Surgery and Traumatology Service
- ♦ Head of Pediatric Traumatology Service at Hospital Sant Joan de Déu
- ♦ Specialist in Pediatric Traumatology and Orthopedic Surgery at the Vall d'Hebron University Hospital
- ♦ Bachelor of Medicine and Surgery at the Central University of Barcelona
- ♦ PhD in Medicine and Surgery from the Autonomous University of Barcelona
- ♦ Member of the Scientific Committee of the Spanish Society of Pediatric Orthopedics

Dr. Chorbadjian Alonso, Gonzalo Andrés

- ♦ Deputy Chief of the Orthopedics and Traumatology Service for Children at Hospital Clínico San Borja Arriarán. Santiago de Chile
- ♦ Child Traumatologist at the Orthopedics and Child Traumatology Service at Hospital Clínico San Borja Arriarán
- ♦ Child Traumatologist at Clínica Alemana. Chile
- ♦ Medical Surgeon from Universidad de Santiago de Chile
- ♦ Specialist in Orthopedics and Traumatology, Universidad de Chile
- ♦ Fellow of Subspecialty in Neuroorthopedics at Hospital Infantil Universitario Niño Jesús Child Jesus University Children's Hospital. Madrid
- ♦ Visiting Fellow at the Children's Orthopedics and Traumatology Service of the Hospital Sant Joan de Deu
- ♦ Visiting Fellow in the Foot and Ankle Team, Neuroorthopedics and Pediatric Orthopedics of the Orthopedic Institute of the University Hospital of Heidelberg. Germany
- ♦ Fellow AO Trauma with Dr. Teddy Slongo at the Inselspital. Bern, Switzerland
- ♦ Member of: AO Trauma, SCHOT and SLAOTI

Dr. Ortega García, Francisco Javier

- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital Universitario 12 de Octubre
- ♦ Collaborating doctor of practical teaching at the Complutense University of Madrid
- ♦ PhD in Medicine from the University of Salamanca
- ♦ Degree in Medicine and Surgery from the Autonomous University of Madrid
- ♦ Specialty of Orthopedic Surgery and Traumatology to the Service of Traumatology II at the Hospital Universitario 12 de Octubre
- ♦ Award for the Best Poster Communication at the GEER Congress
- ♦ Member of GEER and SECOT

Dr. Downey Carmona, Francisco Javier

- ♦ Pediatric Orthopediatric Traumatologist in Orthopediatrics
- ♦ F.E.A. in Pediatric Traumatology at the Virgen del Rocio University Hospital, Seville
- ♦ Member of the Pediatric Orthopedics team at the Virgen del Rocio Children's Hospital for Mauritania
- ♦ President of the Association Ponseti Spain
- ♦ Graduate in Medicine and Surgery from the University of Seville
- ♦ Specialist in Orthopedic Surgery and Traumatology
- ♦ Member of the Spanish Society of Paediatric Orthopaedics
- ♦ Member of the Spanish Society of Orthopedic Surgery and Traumatology
- ♦ Member of the team of the Andalusian Association of Health Cooperation of the Zambo Foot Project

Dr. Duart Clemente, Julio

- ♦ Specialist in Orthopedic Surgery and Traumatology at the University Hospital of Navarra
- ♦ Secretary of the Illustrious College of Physicians of Navarra
- ♦ Secretary of the Spanish Society of Pediatric Orthopedics
- ♦ Resident Intern at the University of Navarra Clinic
- ♦ Associate Professor of Orthopedic Surgery and Traumatology at the Universidad de Navarra
- ♦ PhD in Medicine and Surgery from the Universidad de Navarra
- ♦ Graduate in Medicine and Surgery from the Universidad de Navarra
- ♦ Internships in Pediatric Orthopedics at Cleveland Clinic Foundation (Cleveland, Ohio), Hospital Sant Joan de Deu, University Children's Hospital Basel (Basel, Switzerland), Mayo Clinic (Rochester, Minnesota) and traveling Fellowship EPOS - POSNA
- ♦ Member of: SEOP, EPOS y POSNA

Dr. Farrington Rueda, David M

- ♦ Specialist in Orthopedic Surgery
- ♦ Chief of Orthopedic Surgery and Traumatology Service at Hospital San Juan de Dios del Aljarafe
- ♦ Specialist in Orthopedic Surgery and Traumatology for Children at the University Hospital of Valme
- ♦ Chief of Section of Orthopedic Surgery and Traumatology for Children at the Hospital Universitario Virgen del Rocío
- ♦ Graduate in Medicine and Surgery from the University of Seville
- ♦ Member of: SEOP, IPOTT y GSSG

Dr. Martí Ciruelos, Rafael

- ♦ Head of the Children's Orthopedics and Traumatology Unit at Hospital Sanitas La Moraleja
- ♦ Head of the Children's Orthopedics Section at Hospital Universitario 12 Octubre
- ♦ Teaching residents via MIR in Traumatology at the Hospital Universitario 12 Octubre
- ♦ Bachelor of Medicine and Surgery from the Complutense University. Madrid

Dr. Martínez Caballero, Ignacio

- ♦ Specialist in Orthopedic Surgery and Traumatology for Children
- ♦ Section Chief of the Neuro-orthopedics Unit at the Orthopedics and Traumatology Service of the Hospital Infantil Universitario Niño Jesús
- ♦ Medical Coordinator of the Laboratory of Movement Analysis of the Hospital Infantil Universitario Niño Jesús
- ♦ Member of the group of national and international experts who elaborated the Consensus on the Use of Botulinum Toxin in Cerebral Palsy
- ♦ PhD in Medicine and Surgery from the Autonomous University of Madrid
- ♦ Member of: Professional Scientific Society SOMACOT

Dr. Del Cura Varas, Marisol

- ♦ Assistant Doctor of the Orthopedic Surgery and Traumatology Department of the Ramón y Cajal Hospital
- ♦ Medical Specialist of the Orthopedic Surgery and Traumatology Department of the Hospital Rey Juan Carlos
- ♦ Medical Specialist of the Orthopedic Surgery and Traumatology Department of the Hospital Madrid Norte Sanchinarro
- ♦ Medical Specialist of the Orthopedic Surgery and Traumatology Service of the Fundación Jiménez Díaz de Madrid
- ♦ Medical Specialist of the Orthopedic Surgery and Traumatology Service of the Hospital Niño de Jesús
- ♦ Degree in Medicine from the UAM
- ♦ Member of: ICOMEM y SECOT

Dr. Fernandes de Carvalho, Marcos António

- ♦ Medical Specialist in Orthopedics and Traumatology
- ♦ Bachelor's Degree in Medicine from the University of Coimbra
- ♦ Specific Training in Orthopedics and Traumatology at the Hospital and University Center of Coimbra
- ♦ Specialty in Pediatric Orthopedics at the Pediatric Hospital of CHUC

Dr. García Carrión, Alicia

- ♦ Specialist in Traumatology and Orthopedic Surgery for Children at the CEMTRO Clinic
- ♦ Specialist in Orthopedic Surgery and Traumatology in the Hospital Clínico San Carlos
- ♦ Collaborator in educational programs in her specialty
- ♦ Degree in Medicine and Surgery from the University of Castilla La Mancha

Dr. Fernández Pineda, Israel

- ♦ Faculty member of the Department of Surgery at St. Jude Children's Research Hospital
- ♦ Fellowship in Pediatric Oncologic Surgery at St. Jude Children's Research Hospital, Memphis, USA
- ♦ Faculty area specialist in Pediatric Surgery at the Department of Pediatric Surgery of the Virgen del Rocío Pediatric University Hospital
- ♦ Degree in Medicine from the Complutense University of Madrid
- ♦ Assistant Professor of Pediatrics and Surgery at the University of Tennessee, USA
- ♦ Director of the Pediatric Oncologic Surgery training program at St. Jude Children's Research Hospital
- ♦ Award of the Spanish Society of Pediatric Surgery to the best communication in Pediatric Urology at the National Congress of the SECP (A Coruña), with the communication "Biofeedback and electrostimulation in complicated enuresis"

Dr. Vilalta Vidal, Imma

- ♦ Assistant Doctor of the Orthopedic Surgery and Traumatology Service at the Hospital Sant Joan de Déu, Barcelona
- ♦ Emergency Doctor at the Emergency Department of the CSM
- ♦ Private activity as a collaborator at the Institut Pediàtric of the Hospital Sant Joan de Déu
- ♦ Degree in Medicine and Surgery, Autonomous University of Barcelona
- ♦ MIR Specialty in Orthopedic Surgery and Traumatology at the Hospital of Mataró
- ♦ Specialty in Spine Surgery at the Hospital of Marseille
- ♦ Specialty in Spine Surgery at the Hôpital Pellegrin in Bordeaux
- ♦ Research Sufficiency. Treatment of Distal Radius Fractures using the Epibloc system at the Hospital de Sant Pau
- ♦ Member of: SCCOT, SECOT, SEOP, GEER, SEFEX y APE

Dr. Fraga Collarte, Manuel

- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital Infantil Universitario Niño Jesús
- ♦ Specialist in Orthopedic Surgery and Traumatology, subspecialty in children at the Complejo Hospitalario Universitario de Ourense
- ♦ Visiting fellowship at the Hospital Infantil Universitario Niño Jesús Observership in Hip and Knee Prosthetic Surgery at Helios Endo-Klinik, Hamburg
- ♦ Physician in the Shoulder, Knee and Wrist Arthroscopy Unit at Hospital Universitario Santa Cristina, Madrid
- ♦ Doctor of Traumatology and Orthopedic Surgery Service at the Santa Cristina University Hospital
- ♦ Physician of the Vascular Surgery Service at the Complejo Hospitalario Universitario de Ourense Teacher for pediatricians at Hospital Infantil Universitario Niño Jesús Teacher in Master's Degree in Pediatric Orthopedics at CEU Cardenal Herrera University
- ♦ Bachelor's Degree in Medicine from the University of Santiago de Compostela
- ♦ Professional Master's Degree in Orthopedics for Children CEU Cardenal Herrera University
- ♦ Member of the Spanish Society of Pediatric Orthopedics (SEOP), Spanish Society of Orthopedic Surgery and Traumatology (SECOT), Medical Records Commission of the Children's Hospital. U. Niño Jesús and of the Violence Commission of the Children's Hospital. U. Niño Jesús

Dr. Nieves Riveiro, David

- ♦ FEA of Orthopedic Surgery and Traumatology at the University Hospital Rey Juan Carlos
- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital Universitario del Henares
- ♦ Collaborator for the National Congress of the Spanish Society of Orthopedic Surgery and Traumatology

Dr. Prato de Lima, Carlos Humberto

- ♦ Medical Specialist in Orthopedics and Traumatology
- ♦ Specialist Physician at Hospital Quirónsalud La Luz
- ♦ Traumatologist at the Hospital HM Universitario Sanchinarro
- ♦ Research internship in Neuroorthopedics at Wake Forest University. United States
- ♦ Research stay at Gillette Children's Specialty Healthcare. Minnesota, United States
- ♦ Research Internship at Alfred DuPont Hospital for Children. Delaware, United States
- ♦ Orthopedic Surgeon at Dr. Miguel Perez Carreño Hospital. Venezuela
- ♦ Bachelor's Degree in Medicine and Surgery from Universidad de Los Andes. Venezuela

Dr. Martínez González, Carmen

- ♦ Specialist Physician at the Hospital Universitario Infantil Niño Jesús
- ♦ Physician in the Spine Unit, Pediatric Spine Deformity and Spine Deformity Unit
- ♦ Degree in Medicine and Surgery from the Autonomous University of Madrid

Dr. Manzarbeitia Arroba, Paloma

- ♦ Medical Specialist at the Hospital Universitario Infantil Niño Jesús. Madrid
- ♦ Specialist Physician at the University Hospital Complex of Toledo
- ♦ Medical Specialist in Orthopedic Surgery and Traumatology at the University Hospital of Toledo
- ♦ MIR in Orthopedic Surgery and Traumatology, University Hospital Complex of Toledo
- ♦ External Rotation in the Hand and Upper Limb Surgery Unit in the Traumatology and Orthopedic Surgery Service at HM Montepíncipe Hospital

Dr. González Díaz, Rafael

- ♦ Head of the Spine Surgery Unit, Hospital Infantil Universitario Niño Jesús
- ♦ Head of Spine Surgery Unit, Orthopedic Surgery, Traumatology and Rehabilitation Area. Fundación Alcorcón University Hospital
- ♦ Spine Specialist. MD Anderson International Hospital Spain and Sanitas La Moraleja Hospital
- ♦ Former President of the Spanish Spine Society, Spine Diseases Study Group
- ♦ Member of the Scientific Committee of the Ibero-Latin American Spine Society
- ♦ Doctor in Orthopedic Surgery and Traumatology, Extraordinary Doctorate Award. University of Salamanca
- ♦ Master's Degree in Medical and Clinical Management by the School of Health/UNED
- ♦ Specialist in Orthopedic Surgery and Traumatology Hospital Universitario La Paz
- ♦ Bachelor of Medicine and Surgery Universidad de Salamanca

Dr. González Morán, Gaspar

- ♦ Head of the Pediatric Orthopedics Unit of the Traumatology and Orthopedic Surgery Service at the Hospital Universitario La Paz,
- ♦ Specialist in Traumatology and Orthopedic Surgery. La Princesa Hospital
- ♦ Degree in Medicine and Surgery. Navarra University

Dr. Muñoz Niharra, Borja

- ♦ Orthopedic and Traumatologic Surgeon at the Centro de Especialidades Médicas Getafe
- ♦ Orthopedic and Traumatologic Surgeon at the Hospital Universitario Infanta Elena
- ♦ Doctor at the Orthopedic and Traumatology Unit of the Children's Traumatology and Orthopedics Unit at the CEMTRO Clinic
- ♦ Degree in Medicine from the Autonomous University Madrid

Dr. González Herranz, Pedro

- ♦ Doctor specializing in Children's Orthopedics and Traumatology
- ♦ Head of the Orthopedic Surgery and Traumatology Unit for Children of the University Hospital Complex of La Coruña
- ♦ Consultant of the Orthopedic Surgery and Children's Traumatology Service of the Ramón y Cajal University Hospital
- ♦ Degree in Medicine and Surgery from the University of Navarra
- ♦ Former president and member of the Spanish Society of Pediatric Orthopedics

Dr. Penelas Abelleira, Natalia

- ♦ Assistant Doctor of the Pediatric Traumatology Service of the Hospital Teresa Herrera Materno Infantil A Coruña
- ♦ Resident Intern Physician in Orthopedic Surgery and Traumatology at the University Hospital Complex in A Coruña
- ♦ Degree in Medicine from the University of Santiago de Compostela

Dr. Mediavilla Santos, Lydia

- ♦ Medical Specialist in Traumatology and Orthopedic Surgery at the Hospital General Universitario Gregorio Marañón
- ♦ Specialist Physician at Hospital Universitario San Rafael
- ♦ Specialist Physician of the Section of Musculoskeletal Oncology and Child Musculoskeletal Oncology at the Hospital General Universitario Gregorio Marañón
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid

Dr. Miranda Gorozarri, Carlos

- ♦ Traumatologist at the CEMTRO Clinic
- ♦ Specialist in Traumatology and Orthopedic Surgery at the Monographic Hospital. Madrid
- ♦ Specialist in the Traumatology and Pediatric Orthopedics Service at the Hospital Infantil Universitario Niño Jesús
- ♦ Degree in Medicine and Surgery from the University of Alcalá de Henares

Dr. Patiño Contreras, José Luis

- ♦ Specialist in Traumatology and Orthopedic Surgery at the Marqués Valdecilla University Hospital Marqués de Valdecilla
- ♦ Assistant Doctor at the Notre Dame de la Santé Hospital. Dschang, Cameroon
- ♦ Honorary lecturer at the Universidad Rey Juan Carlos
- ♦ World Health Organization (WHO) award for participation in the National Hip Fracture Registry (RNFC) working group in the working group of the National Hip Fracture Registry (NHRF)
- ♦ Degree in Medicine from the Complutense University of Madrid

Dr. Quesada García, Belén

- ♦ Residency in Orthopedic Surgery and Traumatology at the Hospital General Universitario Nuestra Señora del Prado. Talavera de la Reina, Spain
- ♦ Degree in Medicine from the Autonomous University Madrid
- ♦ Basic Course on Traumatic Hand and Elbow Pathology for Residents
- ♦ OST Speciality Initiation Course (SECOT)
- ♦ Third Clinical Management Conference on Orthogeriatrics in the Community of Madrid at the Hospital Universitario Infanta Sofia

Dr. Pérez-López, Laura M

- ♦ Specialist Doctor of the Pediatric Orthopedic Surgery and Traumatology Service at the Hospital Materno infantil Sant Joan Déu. Barcelona
- ♦ Medical Specialist in Orthopedic Surgery and Pediatric Traumatology at Clínica Diagonal MediFIATC
- ♦ Internship as Orthopedic Surgeon and Traumatologist at the Hôpital des Enfants Toulouse, France
- ♦ Internship as an Orthopedic Surgeon and Traumatologist at Great Ormond Street Children's Hospital. London
- ♦ Internship as Orthopedic Surgeon and Traumatologist at the Children's Hospital. Los Angeles
- ♦ D. Cum Laude from the University of Barcelona
- ♦ Bachelor's Degree in Medicine from the University of Barcelona
- ♦ SEOP Advanced Education Scholarship
- ♦ Member of SEOP, GEMAP of SECMA and COT-SCCOT

Dr. Yáñez Hernández, Marta

- ♦ Medical Specialist in Orthopedic Surgery and Traumatology at the Hospital Universitario Puerta de Hierro Majadahonda
- ♦ Degree in Medicine and Surgery from the Autonomous University of Madrid
- ♦ MIR in Orthopedic Surgery and Traumatology at the Hospital Universitario Puerta de Hierro Majadahonda de Hierro Majadahonda University Hospital
- ♦ Introductory Course to the Specialty of Orthopedic Surgery and Traumatology in SECOT
- ♦ Stryker Basic Cementation Course
- ♦ Basic External Fixation Course at Stryker

Dr. Martínez Álvarez, Sergio

- ♦ Head of the Pediatric Upper Extremity Unit at Beata María Ana Hospital
- ♦ Medical Specialist in the Orthopedic Surgery and Traumatology Service of the Hospital Niño Jesús
- ♦ Medical Specialist in Orthopedic Surgery and Traumatology Hospital Universitario de la Princesa
- ♦ Medical collaboration with Texas Scottish Rite Hospital
- ♦ Medical collaboration with Boston Children's Hospital
- ♦ Medical Collaboration with Cincinnati Children's Hospital
- ♦ Medical Collaboration with Children's National Medical Center Washington
- ♦ Medical collaboration with Atlanta Children's Hospital
- ♦ RECOT, JBJS and RICMA Reviewer
- ♦ Members of the *European Pediatric Orthopedic Society*

Dr. Rojo Santamaría, Rita

- ♦ Specialist in Orthopedic and Trauma Surgery
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Member of: Spanish Society of Orthopedic Surgery and Traumatology

Dr. Salom Taverner, Marta

- ♦ Specialist in Orthopedic and Trauma Surgery
- ♦ Assistant Doctor at the Hospital Universitario y Politécnico La Fe
- ♦ Specialist in Orthopedic Surgery and Traumatology by the Hospital Universitario and Polytechnic Hospital La Fe
- ♦ Degree in Medicine and Surgery from the University of Valencia
- ♦ Member of the Spanish Society of Orthopedic Surgery and Traumatology

Dr. Pérez-Somarriba Moreno, Álvaro

- ♦ Physiotherapist at the Therapies Unit and Movement Analysis Laboratory of the Hospital Infantil Universitario Niño Jesús
- ♦ Head of the Physiotherapy Service at the Sanyres Aravaca Residence
- ♦ Collaborating researcher in the project *Use of myoelectric prostheses in children with congenital unilateral agenesis of the upper limbs*
- ♦ Professor of Physiotherapy Degree at CEU La Salle University
- ♦ Collaborating Professor of the Professional Master's Degree in Biomechanics and Sports Physiotherapy at the San Juan de Dios School of Nursing and Physiotherapy of the University of Comillas
- ♦ Degree in Physiotherapy from the University CEU San Pablo
- ♦ Osteopath graduated from the University of Alcalá
- ♦ Expert in Myofascial Therapy from the European University of Madrid
- ♦ Postgraduate Diploma in Craniomandibular Dysfunction by CEU San Pablo University
- ♦ Official Master, MSc in Biomechanics and Sports Physiotherapy by Comillas University

Dr. Ron Marqués, Alejandra

- ♦ Physician and Surgeon Specialist in the Children's Traumatology Team at the Complejo Hospitalario Universitario Insular Materno Infantil. Las Palmas de Gran Canaria, Spain
- ♦ Physician and Surgeon in the Children's Traumatology and Orthopedics Team at the Centro Clinic
- ♦ FEA in the Orthopedics and Traumatology Unit at the University Hospital of Getafe
- ♦ SECOT Fellowship in the Traumatology Unit at the Hospital for Special Surgery. New York
- ♦ Graduate in Medicine and Surgery from the Complutense University of Madrid

- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Master's Degree in Clinical Management, Medical and Health Care Management
- ♦ Master's Degree in Pediatric Orthopedics
- ♦ Member of SECOT, SEOP and Asociación Ponseti Spain

Dr. Rojas Díaz, Libardo Enrique

- ♦ Specialist in Orthopedic and Trauma Surgery
- ♦ Research Physician at the Latin America Clinical Research Alliance
- ♦ Medical Intern at the University Hospital of Santander
- ♦ Medical Intern at the Regional Hospital of Velez. Santander
- ♦ Observer Doctor of Orthopedic Oncology, Spine and Arthroplasty at the Massachusetts General Hospital. Boston, United States
- ♦ Degree in Medicine and Surgery from Universidad Industrial de Santander

Dr. Sanpera Trigueros, Ignacio

- ♦ Head of Service of Traumatology and Orthopedics for Children at the Hospital Universitari Son Espases
- ♦ Assistant Physician in the Orthopedic Surgery and Traumatology Service at the Joan XXIII University Hospital. London
- ♦ Head of the Orthopedics and Traumatology Service at the Hospital Universitari Son Dureta
- ♦ Doctor of Medicine
- ♦ Degree in Medicine from the Autonomous University of Barcelona
- ♦ Awards: Great Ormon Street, Son Dureta Research, Lloyd Roberts for Best Publication in Orthopaedics, MBA for Best Presentation in Children's Orthopaedics EPOS President
- ♦ Member of POSNA, SECOT, SEOP and EPOS

Dr. Soldado Carrera, Francisco

- ♦ Specialist in Upper Extremity Surgery and Pediatric Microsurgery
- ♦ Director of the Upper Extremity Surgery and Pediatric Microsurgery Unit at the Hospital Universitario Valle de Hebrón
- ♦ Head of the Traumatology and Orthopedic Surgery Department at HM Nens Hospital
- ♦ Specialist in Traumatology and Orthopedic Surgery at Centro Medico Teknon
- ♦ Head of Upper Extremity Surgery in the International Multidisciplinary Unit of Bone Dysplasias at UMAD
- ♦ Collaboration in the development of Orthopedic Surgery in Portugal with the Portuguese Society of Pediatric Orthopedics
- ♦ Director of the Upper Extremity and Pediatric Microsurgery Unit at the Hospital Sant Joan de Déu
- ♦ Pediatric Orthopedic Surgery at Enfants de Noma in Benin. Africa:
- ♦ Pediatric Upper Extremity Surgery in Guatemala Healing Hands Foundation
- ♦ Assistant Physician Specialist in Upper Extremity and Pediatric Microsurgery in the Pediatric Orthopedic Unit at the Hôpital des Enfants CHU. Toulouse France
- ♦ Assistant Physician Specialist in the Pediatric Orthopedics Unit for the Upper Extremity and Pediatric Microsurgery at ESSaude Lisboa, Hospital da Luz and Beatriz Angelo
- ♦ Senior Researcher in Bioengineering, Cell Therapy and Surgery in Congenital Malformations at Vall d'Hebron Research Institute
- ♦ Pediatric Orthopedic Surgery Physician at the Children's Hospital and Hospital de la Mujer Vall d'Hebron Hospital
- ♦ Specialty in Upper Extremity and Pediatric Microsurgery in Philadelphia, USA. A
- ♦ Professor in the Unit of Human Anatomy of the Locomotor System at the Faculty of Medicine of the Autonomous University of Barcelona
- ♦ Member of: Bioengineering, Cellular Therapy and Surgery in Congenital Malformations Research Group (VHIR)

Dr. Villa García, Ángel José

- ♦ Head of Section of Traumatology and Pediatric Orthopedics at the Hospital General Universitario Gregorio Marañón
- ♦ Coordinator of the Children's Hip Consultation and Children's Musculoskeletal Oncology at the Hospital General Universitario Gregorio Marañón
- ♦ Medical Specialist in Traumatology and Orthopedic Surgery at the Hospital General Universitario Gregorio Marañón
- ♦ Degree in Medicine and Surgery from the University of Salamanca

Dr. Sosa González, Guillermo

- ♦ Medical specialist in Traumatology and Orthopedic Surgery
- ♦ Specialist Physician of the Traumatology and Orthopedics Section of the Children's Traumatology and Orthopedics Section of the Hospital General Universitario Gregorio Marañón
- ♦ Specialist physician at the Children's Musculoskeletal Oncology Clinic of the Hospital General Universitario Gregorio Marañón
- ♦ Specialist physician at the Dysmetry and Deaxation Clinic of the Hospital General Universitario Gregorio Marañón
- ♦ Degree in Medicine from the Autonomous University Madrid

Dr. Vara Patudo, Isabel

- ♦ Specialist in Traumatology and Orthopedics for Children at the Centro Creciendo Madrid
- ♦ Assistant Physician of the Orthopedic Surgery and Traumatology Service at the Hospital Infantil Universitario Niño Jesús
- ♦ Assistant Physician of Pediatric Orthopedic Surgery and Traumatology at HM Nens Hospital
- ♦ Assistant Physician of the Orthopedics and Traumatology Service for Children at the Hospital Sant Joan de Déu
- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital Universitario Príncipe de Asturias
- ♦ Degree in Medicine from the University of Alcalá, Spain
- ♦ Professional Master's Degree in Children's Orthopedics by TECH Universidad Tecnológica
- ♦ Advanced Training Program in Pediatric Orthopedic Surgery and Traumatology of the Spanish Society of Pediatric Orthopedics (SEOP)

Dr. Rodríguez del Real, M^a Teresa

- ♦ Degree in Medicine from the Autonomous University Madrid
- ♦ Resident of Orthopedic Surgery and Traumatology at Hospital Universitario Severo Ochoa (Leganés)

06

Educational Plan

The program of studies of this university degree has an exhaustive syllabus based on the most recent scientific evidence on pediatric orthopedics. In this way, the graduate will have the guarantee of accessing an advanced qualification on the different orthopedic conditions and pathologies and their approach from the physiotherapy point of view. All this, in addition, with innovative teaching material, accessible 24 hours a day, from a digital device with internet connection. The culmination of this program is the internship in a prestigious center, which undoubtedly distinguishes this program.



“

A program that includes the most advanced syllabus and the most innovative didactic material, available 24 hours a day"

Module 1. Child Orthopedics

- 1.1. Clinical History of Children and their Examination
 - 1.1.1. The Examination of Infants
 - 1.1.2. The Examination of Teenagers
- 1.2. Radiodiagnosics
- 1.3. Characteristics of Children's Bones and Bone Growth
- 1.4. Angular Deformities
 - 1.4.1. Genu Varum
 - 1.4.2. Genu Valgum
 - 1.4.3. Recurvatum
 - 1.4.4. Antecurvatum
- 1.5. Torsional Deformities
 - 1.5.1. Femoral Anteversion
 - 1.5.2. Tibial Torsion
- 1.6. Length Discrepancy
- 1.7. Pediatric Lamenes
- 1.8. Apophysitis and Enthesitis
- 1.9. Pediatric Fractures
- 1.10. Pediatric Immobilizations and Orthoses
 - 1.10.1. Types of Immobilizations
 - 1.10.2. Duration of the Immobilizations

Module 2. Upper Limb

- 2.1. Agenesis and Transverse Defects
- 2.2. Radial longitudinal deficiency. Hypoplasias and Agenesis of the Thumb
- 2.3. Ulnar Longitudinal Deficiency. Proximal Radioulnar Synostosis
- 2.4. Preaxial and Postaxial Polydactyly
- 2.5. Syndactyly. Macrodactyly Clinodactyly. Camptodactyly. Kirner's Deformity
- 2.6. Amniotic Band Syndrome
- 2.7. Madelung's Deformity
- 2.8. Arthrogryposis
- 2.9. Obstetric Brachial Palsy
- 2.10. Tumors Affecting the Pediatric Hand: Osteochondromatosis, Enchondromatosis and Soft Tissue Tumors

Module 3. Hip

- 3.1. Embryology, Anatomy and Biomechanics of the Hip
- 3.2. Transient Synovitis of the Hip
 - 3.2.1. Etiopathogenesis
 - 3.2.2. Differential Diagnosis
 - 3.2.3. Orthopedic Management
- 3.3. Developmental Dysplasia of the Hip in Children under 18 Months of Age
 - 3.3.1. Concept. Historical Recollection
 - 3.3.2. Dysplasia in Children Under 6 Months of Age
 - 3.3.2.1. Diagnostic Examination
 - 3.3.2.2. Hip Ultrasound. Methods and Interpretation
 - 3.3.2.3. Therapeutic Orientation
 - 3.3.3. Dysplasia in Children aged 6-12 Months
 - 3.3.3.1. Clinical and Radiological Diagnosis
 - 3.3.3.2. Treatment
 - 3.3.4. Dysplasia in Walking Children (>12 Months)
 - 3.3.4.1. Late Diagnosis Errors
 - 3.3.4.2. Treatment Management
- 3.4. Developmental Dysplasia of the Hip in Children over 18 Months Old
 - 3.4.1. Definition and Natural History
 - 3.4.2. Etiology and Clinical Manifestations
 - 3.4.3. Clinical and Radiological Classification. Hip Risk Factors
 - 3.4.4. Differential Diagnosis
 - 3.4.5. Treatment
- 3.5. Hip Dysplasia in Older Children and Teenagers
 - 3.5.1. Causes and Types
 - 3.5.2. Diagnostic Guidance
 - 3.5.2.1. Teenage Hip Dysplasia Radiology
 - 3.5.2.2. Complementary Studies of Dysplasia: MRI, Arthro rmn, tac, etc
 - 3.5.3. Treatment
 - 3.5.3.1. Arthroscopic Treatment
 - 3.5.3.2. Open Surgery
 - 3.5.3.2.1. Pelvic Osteotomies. Techniques and Guidelines
 - 3.5.3.2.2. Femoral Osteotomies. Techniques and Guidelines

- 3.6. Legg-Calvé-Perthes Disease
 - 3.6.1. Perthes After-Effects
 - 3.6.2. Syndromic Hip
 - 3.6.3. Chondrolysis
 - 3.6.4. Sequelae of Arthritis (Septic, Rheumatic Diseases, etc.)
- 3.7. Epiphysiolysis of the Femoral Head
 - 3.7.1. Diagnosis. The way they are formed
 - 3.7.2. Etiopathogenesis
 - 3.7.3. Types of Epiphysiolysis. Pathophysiological Mechanism
 - 3.7.4. Surgical Management
 - 3.7.4.1. In Situ Reduction
 - 3.7.4.2. Modified Dunn
 - 3.7.4.3. Late Treatment
- 3.8. Coxa vara
 - 3.8.1. Etiopathogenesis
 - 3.8.2. Differential Diagnosis
 - 3.8.3. Treatment
- 3.9. Musculoskeletal Pain Around the Hips in Children
 - 3.9.1. Snapping Hip Syndrome
 - 3.9.1.1. Types of Snapping (Internal, External)
 - 3.9.1.2. Treatment
 - 3.9.2. Enthesitis Around the Hips in Children
 - 3.9.2.1. Enthesitis of the Spines (EIAS): Differential Diagnosis and Treatment
 - 3.9.2.2. Ischial and Iliac Crest Enthesitis. Diagnosis and Treatment
- 3.10. Hip Fractures in Children
 - 3.10.1. Biomechanical Implications of the Hip Fractures in Children
 - 3.10.2. Types of Fractures. Classification
 - 3.10.3. Diagnosis and Treatment. Treatment Management
 - 3.10.3.1. Children With Open Physes
 - 3.10.3.2. Children With Skeletal Maturity

Module 4. knee

- 4.1. Congenital Dislocation of the Knee
 - 4.1.1. Diagnosis and Classification
 - 4.1.2. Etiology
 - 4.1.3. Clinical - Radiological Findings
 - 4.1.4. Differential Diagnosis
 - 4.1.5. Clinical Findings and Associated Lesions
 - 4.1.6. Treatment
- 4.2. Patellofemoral Instability
 - 4.2.1. Prevalence and Etiology
 - 4.2.2. Types: Recurrent Dislocation, Recurrent Subluxation, Habitual Dislocation and Chronic Dislocation
 - 4.2.3. Associated Conditions
 - 4.2.4. Clinical Findings
 - 4.2.5. Radiological Findings
 - 4.2.6. Treatment
- 4.3. Osteochondritis Dissecans
 - 4.3.1. Definition and Aetiology
 - 4.3.2. Pathology
 - 4.3.3. Clinical Radiological Findings
 - 4.3.4. Treatment
- 4.4. Discoid Meniscus
 - 4.4.1. Pathogenesis
 - 4.4.2. Clinical - Radiological Findings
 - 4.4.3. Treatment
- 4.5. Popliteal Cyst
 - 4.5.1. Definition and Clinical Findings
 - 4.5.2. Differential Diagnosis
 - 4.5.3. Pathology
 - 4.5.4. Diagnostic Tests
 - 4.5.5. Treatment

- 4.6. Apophysitis: Osgood-Schlatter's Disease, Sinding-Larsen-Johansson's Disease
 - 4.6.1. Definition and Epidemiology
 - 4.6.2. Clinical and Radiological Findings
 - 4.6.3. Treatment
 - 4.6.4. Complications
- 4.7. Ligament Lesions of the Knee: Anterior Cruciate Ligament
 - 4.7.1. Prevalence and Etiology
 - 4.7.2. Diagnosis
 - 4.7.3. Treatment in Patients with Growth Cartilage
- 4.8. Epiphyseolysis of the Distal Femur and Fractures of the Proximal Tibia
 - 4.8.1. Anatomic Considerations. Pathophysiology
 - 4.8.2. Diagnosis
 - 4.8.3. Treatment
- 4.9. Fractures of the Tibial Spines
 - 4.9.1. Pathophysiology
 - 4.9.2. Anatomic Considerations
 - 4.9.3. Diagnosis
 - 4.9.4. Treatment
- 4.10. Anterior Avulsion Fracture
 - 4.10.1. Pathophysiology
 - 4.10.2. Anatomic Considerations
 - 4.10.3. Diagnosis
 - 4.10.4. Treatment
- 4.11. Periosteal Tear of the Patella
 - 4.11.1. Pathophysiology
 - 4.11.2. Anatomic Considerations
 - 4.11.3. Diagnosis
 - 4.11.4. Treatment

Module 5. Pathology of the Foot

- 5.1. Embryology. Malformations and Deformities of the Foot in Newborns
 - 5.1.1. Polydactyly
 - 5.1.2. Syndactyly
 - 5.1.3. Ectrodactyly
 - 5.1.4. Macrodactyly
 - 5.1.5. Calcaneal Valgus or Talus Foot
- 5.2. Congenital Vertical Astragalus
- 5.3. Flexible Valgus Flatfoot
- 5.4. Serpentine Foot
- 5.5. Tarsal Coalition
- 5.6. Metatarsus Adductus and Metatarsus Varus
- 5.7. Congenital Clubfoot
- 5.8. Pes Cavus
- 5.9. Hallux valgus
- 5.10. Toe Pathology
 - 5.10.1. Hallux Varus
 - 5.10.2. Quintus Varus
 - 5.10.3. Quintus Supraductus
 - 5.10.4. Deformities of Small Toes: Mallet Toe, Hammer Toe, Claw Toe, Clinodactyly
 - 5.10.5. Brachymetatarsia
 - 5.10.6. Constriction Band Syndrome
 - 5.10.7. Agenesis and Hypoplasia of the Toes
- 5.11. Miscellaneous
 - 5.11.1. Osteochondrosis: Köning's Disease, Freiberg's Disease
 - 5.11.2. Apophysitis: Sever's Disease, Iselin's Disease
 - 5.11.3. Os Trigonum Syndrome
 - 5.11.4. Accessory Scaphoid
 - 5.11.5. Osteochondritis Dissecans of the Talus

Module 6. Spine

- 6.1. Surgical Anatomy and Approaches to the Spine
- 6.2. Cervical Spine Pathology
 - 6.2.1. Congenital Torticollis
 - 6.2.1.1. Muscular Congenital Torticollis
 - 6.2.1.2. Klippel-Feil Syndrome
 - 6.2.2. Acquired Torticollis
 - 6.2.2.1. Atlantoaxial Dislocation
 - 6.2.2.2. Other Causes: Inflammatory, Infectious, Sandifer's Syndrome
 - 6.2.3. Cervical instability: *os odontoides*
- 6.3. Spine Pathology
 - 6.3.1. Spondylolisthesis
 - 6.3.2. Juvenile Disc Herniation
 - 6.3.3. Scoliosis
 - 6.3.4. Early Onset
 - 6.3.5. Teenage Idiopathic Scoliosis
 - 6.3.6. Congenital Scoliosis
 - 6.3.7. Neuromuscular Scoliosis
 - 6.3.8. Early Onset Scoliosis
 - 6.3.9. Congenital Scoliosis
 - 6.3.10. Neuromuscular Scoliosis
 - 6.3.11. Spine Deformity in Other Syndromes
- 6.4. Spondylolisthesis
- 6.5. Alterations in the Sagittal Plane: Hyperkyphosis, Hyperlordosis
- 6.6. Back Pain in the Pediatric Age
- 6.7. Spinal Tumors
- 6.8. The Main Spine Fractures in Children

Module 7. Orthopedic Alterations Linked to Neuromuscular Diseases

- 7.1. Pediatric Cerebral Palsy
- 7.2. Normal and Pathological Gait. Usefulness of the Ian In Gait Disturbances
- 7.3. Orthopedic Management of PCI: Botulinum Toxin, Casts, Orthoses
- 7.4. Hip Pathology in PCI
- 7.5. Crouch Gait in PCI
- 7.6. Myelomeningocele
- 7.7. Spinal Muscular Atrophy
- 7.8. Muscular Dystrophies: Duchenne's Disease, Other Myopathies
- 7.9. Neurological Upper Limb: Spasticity
- 7.10. Foot Associated With Neurological Pathologies (Clubfoot...)

Module 8. Skeletal Dysplasias and Syndromic Diseases

- 8.1. Achondroplasia. Hypochondroplasia and Pseudoachondroplasia
- 8.2. Congenital Malformations of the Lower Limb
- 8.3. Other Dysplasias: Spondyloepiphyseal Dysplasia, Multiple Epiphyseal Dysplasia, Diastrophic Dysplasia, Kniest Dysplasia, Osteopetrosis, Infantile Cortical Hyperostosis, Cleidocranial Dysostosis
- 8.4. Mucopolysaccharidosis
- 8.5. Osteogenesis Imperfecta
- 8.6. Hyperlaxity Syndromes
 - 8.6.1. General Hyperlaxity Syndrome
 - 8.6.2. Marfan and Ehlers Danlos Syndromes
- 8.7. Neurofibromatosis. Congenital Pseudoarthrosis of the Tibia
- 8.8. Arthrogyposis
- 8.9. Down Syndrome
- 8.10. Children's Bone Alterations
 - 8.10.1. Rickets
 - 8.10.2. Transient Osteoporosis

Module 9. Osteoarticular Infections

- 9.1. Septic Arthritis
- 9.2. Osteomyelitis
- 9.3. Discitis and Vertebral Osteomyelitis
- 9.4. Orthopedic Pathology in Rheumatoid Arthritis
- 9.5. Other Arthropathies: Psoriatic Arthritis Reiter's Syndrome, Psoriatic Arthritis
- 9.6. Chronic Recurrent Multifocal Osteomyelitis. CRMO

Module 10. Tumours

- 10.1. Overview and Staging of Musculoskeletal Tumors
 - 10.1.1. Epidemiology
 - 10.1.2. Clinical Presentation
 - 10.1.3. Imaging Tests
 - 10.1.4. Staging
 - 10.1.4.1. Benign Tumors
 - 10.1.4.2. Malignant tumours
- 10.2. Biopsy and Treatment Principles
 - 10.2.1. Types of Biopsy
 - 10.2.2. How to Perform a Musculoskeletal Biopsy?
 - 10.2.3. Types and Principles of Oncologic Resection
- 10.3. Cystic Lesions
 - 10.3.1. Simple Bone Cyst
 - 10.3.2. Aneurysmal Bone Cyst
- 10.4. Benign Tumors from Cartilage in Children
 - 10.4.1. Osteochondroma. Osteochondromatosis
 - 10.4.2. Enchondroma. Endochromatosis
 - 10.4.3. Chondroblastoma
 - 10.4.4. Chondromyxoid Fibroma
- 10.5. Benign Tumors from Bones in Children
 - 10.5.1. Osteoma Osteoid
 - 10.5.2. Osteoblastoma



- 10.6. Benign Tumors from Fibrous Tissue in Children
 - 10.6.1. Non-Ossifying Fibroma
 - 10.6.2. Fibrous Dysplasia
 - 10.6.3. Osteofibrous Dysplasia
 - 10.6.4. Langerhans cell histiocytosis
- 10.7. Other Tumours. Miscellaneous
 - 10.7.1. Langerhans Cell Histiocytosis. Eosinophilic Granuloma
 - 10.7.2. Giant Cell Tumor
- 10.8. Benign Tumors From Soft Tissue in Children
 - 10.8.1. Ganglion. Popliteal Cysts
 - 10.8.2. Giant cell tumour of the Tendon Sheath. Villonodular Synovitis
 - 10.8.3. Hemangioma
- 10.9. Malignant Bone Tumors of the Pediatric Skeleton
 - 10.9.1. Ewing Sarcoma
 - 10.9.2. Osteosarcomas
 - 10.9.3. Surgical Treatment Options for Unformed Skeletons
- 10.10. Malignant Tumors in Soft Tissue in Children
 - 10.10.1. Rhabdomyosarcoma
 - 10.10.2. Synovial Sarcoma
 - 10.10.3. Congenital Fibrosarcoma



TECH has designed an academic option that fits your real needs for updating in Pediatric Orthopedics"



07

Clinical Internship

After completing the theoretical phase of this program, students will have the opportunity to carry out an internship in a clinical center selected by TECH. During this period, the graduate will be involved in the use of the most advanced therapeutic techniques and the use of resources necessary to provide care to people in their homes.





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Take an internship in a distinguished clinical center and perfect your therapeutic skills on children's patients with the best experts"

The Hybrid Professional Master's Degree in Pediatric Orthopedics offers the opportunity to do an internship in a first level health center, working from Monday to Friday with specialists in practical training for 8 consecutive hours. During this internship, physical therapist professionals will have the opportunity to deal with real pediatric patients and learn from a team of leading specialists in the field of Pediatric Orthopedics. In addition, you will be able to use the most innovative diagnostic techniques and the latest generation therapies for each pathology. This program offers a hands-on experience in which professionals can develop and expand their skills in the management of orthopedic pathologies in the pediatric population, through a multidisciplinary and highly specialized approach.

This program is completely practical and focuses on the development and improvement of the skills necessary to provide health care in areas and situations that require a high level of qualification. The program is oriented to specific training for professional practice in a safe environment for the patient and with high performance on the part of the professional.

This enriching practical experience will facilitate the improvement of the competencies of physical therapists, who will be involved in actions that will allow them to develop their skills and knowledge in the field of pediatric orthopedics and improve their care of pediatric patients. TECH offers a unique opportunity to transform a clinical center into the best space for an effective update from the hands of real specialists.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other training partners that facilitate teamwork and multidisciplinary integration as transversal competencies for the praxis of physical therapy (learning to be and learning to relate).





The procedures described below will form the basis of the practical part of the internship, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

Module	Practical Activity
Assessment and Diagnosis	Perform an assessment of joint range of motion at the knee in patients with congenital knee dislocation
	Practice assessment of gait in patients with infantile cerebral palsy
	Perform posture and alignment assessment in patients with adolescent idiopathic scoliosis
Therapeutic training planning	Plan a training program to improve patellofemoral stability in patients with patellofemoral instability
	Designing an exercise program to improve muscle strength in patients with Duchenne muscular dystrophy
	Plan an exercise routine to correct crouched gait in patients with infantile cerebral palsy
Implementation of therapeutic training	Teach the patient with myelomeningocele trunk strengthening exercises to improve postural stability
	Implement an occupational therapy program to improve functionality in patients with osteochondritis dissecans of the talus
	Teach patients with hyperkyphosis stretching exercises to improve posture and reduce back pain
Follow-up and adaptation of therapeutic training	Evaluate the progression of the training program in patients with osteogenesis imperfecta and make the necessary adjustments
	Follow up the exercise program in patients with anterior tuberosity pullout fracture and adapt it according to their progress
	Evaluate the effectiveness of treatment in patients with septic arthritis and modify it if needed

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship program agreement shall be as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the student does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Clinical Internship?

TECH has made a careful selection of medical centers in order to ensure that professionals have the possibility of accessing the most outstanding specialists in Physiotherapy, and can advance in their updating process in a suitable environment. As a result, the program provides an exceptional opportunity to develop advanced practical and theoretical skills in the techniques and methodologies used in home care, thanks to the experience of real experts in the field.



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*Incorporate into your clinical practice
the main advances in Pediatric
Orthopedics thanks to the methodology
observed in a reference clinical center"*



The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:



Physiotherapy

Hospital Maternidad HM Belén

Country	City
Spain	La Coruña

Address: R. Filantropía, 3, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Update in Assisted Reproduction
- Hospitals and Health Services Management



Physiotherapy

Hospital HM Rosaleda

Country	City
Spain	La Coruña

Address: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Hair Transplantation
- Orthodontics and Dentofacial Orthopedics



Physiotherapy

Hospital HM La Esperanza

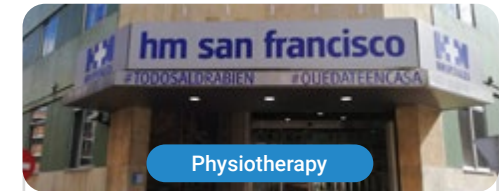
Country	City
Spain	La Coruña

Address: Av. das Burgas, 2, 15705, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Oncology Nursing
- Clinical Ophthalmology



Physiotherapy

Hospital HM San Francisco

Country	City
Spain	León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Update in Anesthesiology and Resuscitation
- Nursing in the Traumatology Department



Physiotherapy

Hospital HM Regla

Country	City
Spain	León

Address: Calle Cardenal Landázuri, 2, 24003, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Update on Psychiatric Treatment in Minor Patients



Physiotherapy

Hospital HM Nou Delfos

Country	City
Spain	Barcelona

Address: Avinguda de Vallcarca, 151, 08023 Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Aesthetic Medicine
- Clinical Nutrition in Medicine



Physiotherapy

Hospital HM Madrid

Country	City
Spain	Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Palliative Care
- Anaesthesiology and Resuscitation



Physiotherapy

Hospital HM Montepíncipe

Country	City
Spain	Madrid

Address: Av. de Montepíncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Palliative Care
- Aesthetic Medicine



Physiotherapy

Hospital HM Torrelodones

Country: Spain City: Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Physiotherapy

Hospital HM Sanchinarro

Country: Spain City: Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Physiotherapy

Hospital HM Nuevo Belén

Country: Spain City: Madrid

Address: Calle José Silva, 7, 28043, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- General and Digestive System Surgery
- Clinical Nutrition in Medicine



Physiotherapy

Hospital HM Puerta del Sur

Country: Spain City: Madrid

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Palliative Care
- Clinical Ophthalmology



Physiotherapy

Hospital HM Vallés

Country: Spain City: Madrid

Address: Calle Santiago, 14, 28801, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Gynecologic Oncology
- Clinical Ophthalmology



Physiotherapy

Policlínico HM Arapiles

Country: Spain City: Madrid

Address: C. de Arapiles, 8, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Anaesthesiology and Resuscitation
- Pediatric Dentistry



Physiotherapy

Policlínico HM Distrito Telefónica

Country: Spain City: Madrid

Address: Ronda de la Comunicación, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Optical Technologies and Clinical Optometry
- General and Digestive System Surgery



Physiotherapy

Policlínico HM Gabinete Velázquez


Country: Spain City: Madrid

Address: C. de Jorge Juan, 19, 1° 28001, 28001, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Clinical Nutrition in Medicine
- Aesthetic Plastic Surgery

Physiotherapy

Policlínico HM La Paloma


Country	City
Spain	Madrid

Address: Calle Hilados, 9, 28850, Torrejón de Ardoz, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Advanced Operating Room Nursing
- Orthodontics and Dentofacial Orthopedics



Physiotherapy

Policlínico HM Las Tablas


Country	City
Spain	Madrid

Address: C. de la Sierra de Atapuerca, 5, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Nursing in the Traumatology Department
- Diagnosis in Physiotherapy



Physiotherapy

Policlínico HM Moraleja


Country	City
Spain	Madrid

Address: P.º de Alcobendas, 10, 28109, Alcobendas, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Rehabilitation Medicine in Acquired Brain Injury Management



Physiotherapy

Policlínico HM Rosaleda Lalín


Country	City
Spain	Pontevedra

Address: Av. Buenos Aires, 102, 36500, Lalín, Pontevedra

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Advances in Hematology and Hemotherapy
- Neurological Physiotherapy



Physiotherapy

Policlínico HM Imi Toledo


Country	City
Spain	Toledo

Address: Av. de Irlanda, 21, 45005, Toledo

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Electrotherapy in Rehabilitation Medicine
- Hair Transplantation



Physiotherapy

Small Hauhgthon Rehab

Country	City
Mexico	Mexico City

Address: Nicolás San Juan 1319 Col. Del Valle
Sur Benito Juárez

Related internship programs:
Geriatric Physiotherapy
Sports Physiotherapy



Make the most of this opportunity to surround yourself with expert professionals and learn from their work methodology"

08

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.





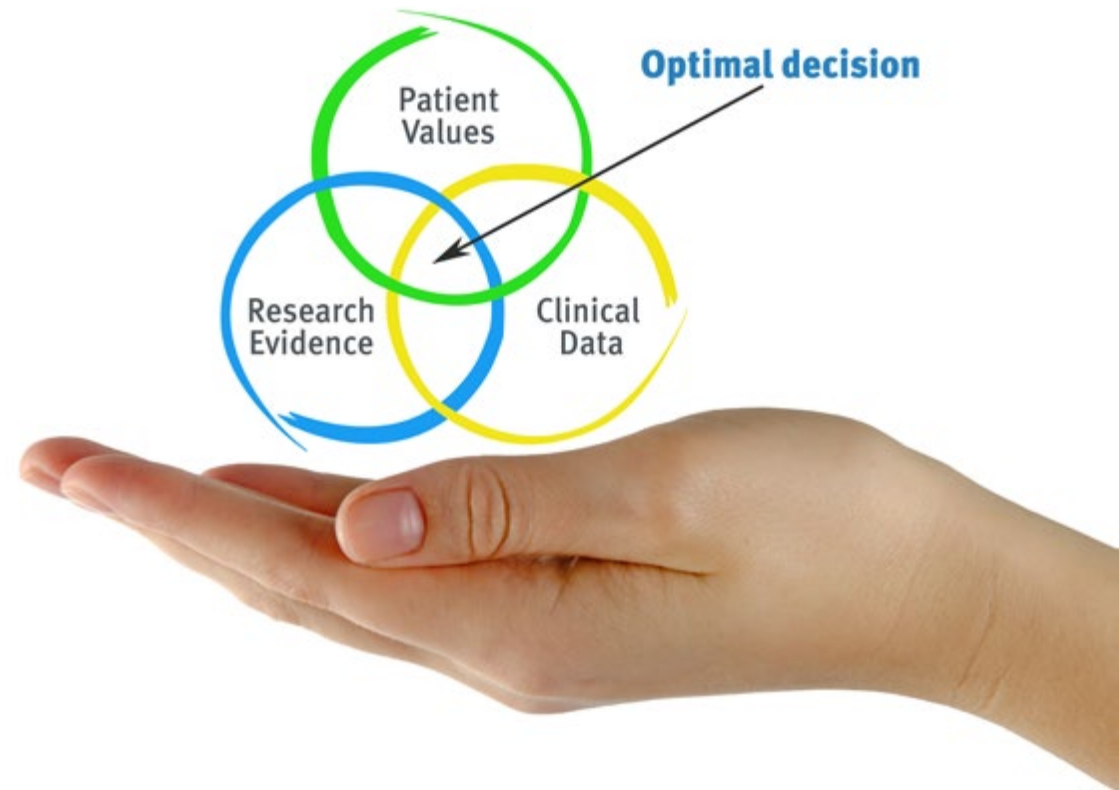
“

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.



The physiotherapist/kinesiologist will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.

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 we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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 our 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 really 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.



Physiotherapy Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. 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 them as many times as you want.



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.

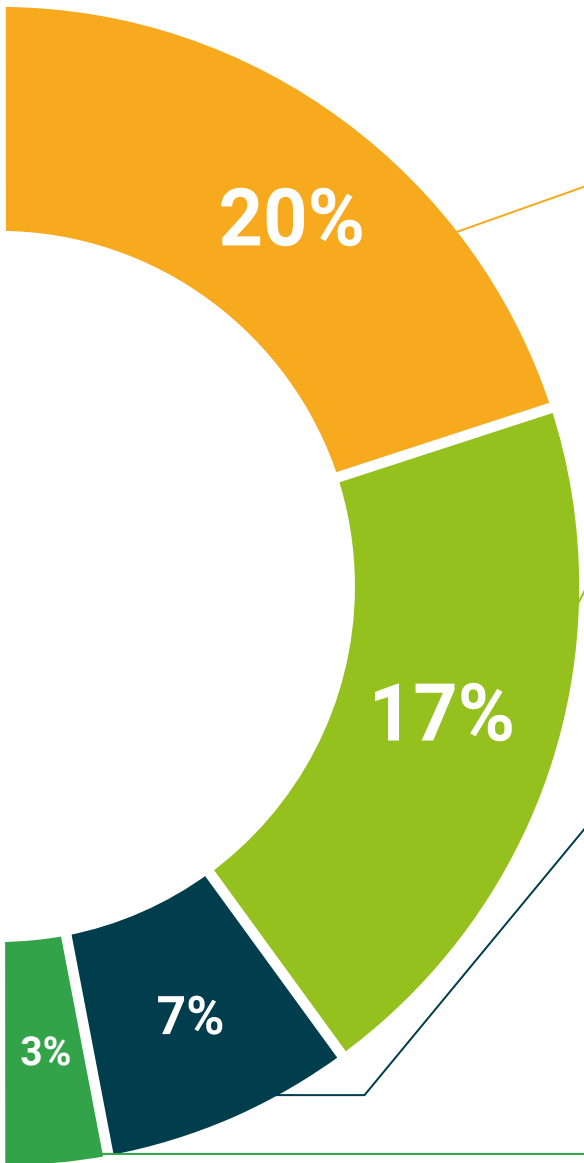
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



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 & 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.



10 Certificate

The Hybrid Professional Master's Degree in Pediatric Orthopedics guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree diploma issued by TECH Global University.



“

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 **Hybrid Professional Master's Degree diploma in Pediatric Orthopedics** 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: **Hybrid Professional Master's Degree in Pediatric Orthopedics**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Global University**

Recognition: **60 + 5 ECTS Credits**



*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.



Hybrid Professional Master's Degree

Pediatric Orthopedics

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

Hybrid Professional Master's Degree Pediatric Orthopedics

