

# Professional Master's Degree Update on Pediatric Rheumatology

With scientific endorsement from:





## Professional Master's Degree Update on Pediatric Rheumatology

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

Website: [www.techtute.com/us/medicine/professional-master-degree/master-update-pediatric-rheumatology](http://www.techtute.com/us/medicine/professional-master-degree/master-update-pediatric-rheumatology)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Skills

---

*p. 12*

04

Course Management

---

*p. 16*

05

Structure and Content

---

*p. 22*

06

Methodology

---

*p. 30*

07

Certificate

---

*p. 38*

# 01

# Introduction

Paediatric Rheumatology is a specialty in which 360\* care is nothing less than essential. Due to the characteristics of the patient, attention to the family becomes another variable to incorporate into the approach to the disease. This Professional Master's Degree in Update in Paediatric Rheumatology will cover how to manage this specialty. With an innovative approach, focused on the problems and not directly on the diseases, this Professional Master's Degree will show you how to approach and carry out the comprehensive and multidisciplinary treatment that RD in children and adolescents need. A specific and intensive training provides the most advanced diagnostic and intervention tools in the current scientific field.



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*This complete Professional Master's Degree in Update on Pediatric Rheumatology Update will give you the key characteristics of new approaches, from an innovative and global perspective”*

Childhood is not a territory exempt from rheumatological disease (RD). Although it is difficult to know their exact prevalence, given the absence of specific and global studies, they are potentially serious diseases that carry with them a significant decrease in the quality of life of the affected child. Comprehensive care for patients and their families as a fundamental part of the process is an essential condition in the approach to this group of diseases.

This Professional Master's Degree offers a different look at global care that a child affected by RD needs. A comprehensive approach that covers all aspects of this care: from pre- and post-diagnostic care for families, pharmacological criteria, and psychological and emotional care for the affected person and their environment. A holistic approach will be acquired through the most specific and comprehensive online training on the market.

During this very complete Master's Degree you will have the opportunity to acquire the basic knowledge necessary to deal with the situations that arise around a child or adolescent suspected of having a RD and ME. From the moment of diagnosis, together with the development of the guidelines to be followed by the specialist, to the information on procedures or approaches to be avoided in this medical practice.

This program will also offer you a different view of what RD means thanks to the participation of expert patients; an unparalleled opportunity to complement your medical knowledge from a different perspective. This approach of the Master's Degree is intended to respond to the need for general practitioners, orthopaedic surgeons, paediatricians, rheumatologists, social workers, nurses, psychologists and many other professionals to be able to manage situations with a high impact on the lives of children and young people and their families.

This **Professional Master's Degree in Update on Pediatric Rheumatology** offers you the features of a high-level scientific, educational, and technological program. These are some of its most notable features:

- ♦ The latest technology in online teaching software
- ♦ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ♦ Case studies presented by practising experts
- ♦ State-of-the-art interactive video systems.
- ♦ Teaching supported by remote learning
- ♦ Continuous updating and recycling systems
- ♦ Autonomous learning: full compatibility with other occupations
- ♦ Practical exercises for self-evaluation and learning verification
- ♦ Support groups and educational synergies: questions to the experts, discussions and knowledge forums
- ♦ Communication with the teacher and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an internet connection
- ♦ Supplementary documentation databases are permanently available, even after the course



*All aspects of the practice of Paediatric Rheumatology, with a global vision of the care of the affected patient, in the most complete Professional Master's Degree in the online teaching market"*

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*The teachers of this Master's Degree have been selected on the basis of two fundamental factors: their experience and knowledge of RD in paediatrics and their proven teaching skills"*

Our teaching staff is composed of medical professionals, who are practising specialists. In this way it is ensured that the student is provided with the upgrade target that is intended. A multidisciplinary team of medical experience in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will bring their practical knowledge derived from their own experience to the program: one of the aspects that sets this Professional Master's Degree apart.

This mastery of the subject is complemented by the effectiveness of the methodology used in the design of this Professional Master's Degree. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. In this way, the student will be able to learn by using a range of comfortable and versatile multimedia tools that will give him the operability he needs in his training.

The design of this program is based on Problem-Based Learning: an approach that regards learning as an intensely practical process. To achieve this remotely, we will use E-learning: with the help of an innovative interactive video system, and learning from an expert, students will be able to acquire knowledge as if they were actually facing the scenario they are learning at that moment. A concept that will allow the student to integrate and lock in learning in a more realistic and permanent way.

*With a methodological design based on proven teaching techniques, this Professional Master's Degree will take the student through different teaching approaches to allow him to learn in a dynamic and effective way*

*Our innovative E-learning approach allows for an immersive learning experience, providing faster integration and a much more realistic view of the content: learning from an expert*

# 02 Objectives

Our objective is to train highly competent professionals who possess the most up-to-date knowledge and techniques in the medical field. A goal that, in just six months, students will be able to achieve thanks to a high-intensity and precise program.







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*Our goal is yours: to provide the most comprehensive update in Paediatric Rheumatology Update currently available"*



## General Objectives

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- ♦ Distinguish between different types of musculoskeletal problems in children, addressing and referring them as needed.
- ♦ Treat them from different points of view, be they medical, psychological or physical, or in any case interpret the suitability of applicable treatments.
- ♦ Assess whether a treatment was sufficiently effective
- ♦ Know which approaches, treatments and strategies are inappropriate and should be avoided.
- ♦ Prevention of diseases and complications
- ♦ Identifying basic needs and making referrals to specialized resources
- ♦ Identify social and environmental factors and consider the impact they have on the quality of life of patients and their families.



## Specific Objectives

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- ♦ Acquire the basic knowledge for the diagnosis of R&MD.
- ♦ Determine the initial approaches and actions to be taken in the diagnosis of R&MDs
- ♦ Learn to rule out specific diseases
- ♦ Understand the benefits of the different tests
- ♦ Identify the procedures or approaches to be eliminated and why.
- ♦ Acknowledging the pain of the child or adolescent with R&MD as the most frequent problem.
- ♦ Identifying the signs and symptoms of pain in the patient
- ♦ Understanding the consequences of the patient's pain in a family environment
- ♦ Distinguish the most frequent and the rarest causes of pain in the different areas of the muscular-skeletal system.
- ♦ Review of appropriate initial management
- ♦ Identify inappropriate initial management
- ♦ Diagnosis of paediatric arthritis
- ♦ Diagnosis of arthritis versus ruling out other pathologies.
- ♦ Application of differential diagnosis in the suspicion of arthritis from its onset in its various forms.
- ♦ Outline of aetiological treatment
- ♦ Identify appropriate and inappropriate assumptions and beliefs.
- ♦ Review the association of fever with other systemic symptoms of inflammation of the eye,

skin and digestive tract.

- ♦ Recognizing the rheumatological significance of inflammation and fever
- ♦ Identify appropriate and inappropriate assumptions and beliefs.
- ♦ Differentiate other symptoms indicative of R&MD: alterations in gait, hyperlaxity or deformity.
- ♦ Specific examination of other symptoms
- ♦ Detect the most frequent and the rarest causes of a disease.
- ♦ Judging overall approach and management
- ♦ Review actions to avoid, such as overdiagnosis and excessive use of medicine.
- ♦ Identify appropriate and inappropriate assumptions and beliefs.
- ♦ Review drug treatments
- ♦ Look at common treatments for different conditions
- ♦ Review practical aspects of medication
- ♦ Identifying the adverse effects of the medication
- ♦ Monitoring the progress of pharmacological treatment, in children and adolescents
- ♦ Identify appropriate and inappropriate assumptions and beliefs.
- ♦ Providing a psychological approach to R&MDs to patients and their families
- ♦ Become familiar with the use of physical exercise as a rehabilitation technique.
- ♦ Identifying the timing of orthopaedic surgery

- ♦ Explaining proper nutrition guidelines
- ♦ Identify the range of existing social supports
- ♦ Identify appropriate and inappropriate assumptions and beliefs.
- ♦ Reviewing vaccination schedules
- ♦ Choosing specific preventive approaches according to diseases and treatments
- ♦ The identification of osteoporosis in children and its necessary considerations
- ♦ Description of the transitional phases and procedures of the management of adults with R&MD to the management of paediatric patients.



*The fundamentals of holistic care in rheumatological conditions in paediatric-juvenile patients, in a practical approach that allows for its immediate application”*

# 03 Skills

Medicine is a constantly evolving and developing field. This means that professionals in the field must be truly passionate about their work: continuous retraining and updating is one of the essential requirements to remain at the forefront, with the quality that medical practice requires. This Professional Master's Degree will allow you to acquire the skills required in this regard. A comprehensive approach, in a high-level Professional Master's Degree, that distinguishes it from the rest.





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*This highly effective Professional Master's Degree enables the acquisition of the necessary skills to create a protocol for the care of paediatric patients with MD and RD that provides both doctor and patient with the security of a totally effective and comprehensive approach”*

The student will acquire the following skills and proficiencies:



### Basic Skills

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- ♦ Have the ability to list the most frequent causes of MD pain in children.
- ♦ Identifying disease characteristics
- ♦ Possess the ability to determine a probable diagnosis
- ♦ Develop management strategies
- ♦ Determine the appropriateness of the approach to the child or adolescent with R&MD
- ♦ Distinguish between different types of musculoskeletal problems in children, addressing and referring them as needed.
- ♦ Identify the best management approach applicable from different points of view, medical, psychological or physical
- ♦ Assess whether a treatment was sufficiently effective
- ♦ Know which approaches, treatments and strategies are inappropriate and should be avoided.
- ♦ Prevention of diseases and complications
- ♦ Identifying basic needs and making referrals to specialized resources
- ♦ Identify social and environmental factors and consider the impact they have on the quality of life of patients and their families.



### Specific Skills

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- ♦ Discerning the right approach to a child with suspected R&MD
- ♦ Exhibit basic knowledge on R&MD's
- ♦ Exercise a good diagnostic approach
- ♦ How to screen a child to rule out R&MD
- ♦ How to screen an adolescent to rule out R&MD
- ♦ Consider the usefulness of tests to rule out R&MD
- ♦ MD pain in children and adolescents
- ♦ Apply basic knowledge of pain identification in children and adolescents.
- ♦ Managing a good diagnostic approach to pain
- ♦ Rationale for pain management
- ♦ Know the most frequent causes of pain in each area of the body.
- ♦ Determine the usefulness of tests to rule out rare causes of pain
- ♦ Joint inflammation
- ♦ Acquire basic knowledge about arthritis
- ♦ Adopting the correct diagnostic approach to arthritis in children and adolescents
- ♦ Understand the management of arthritis in children and adolescents
- ♦ Identify the most common causes of arthritis
- ♦ Consider the usefulness of tests to rule out rare causes of arthritis
- ♦ Possess basic knowledge of systemic inflammatory diseases

- ♦ Adopting the correct diagnostic approach to systemic signs and symptoms in children with R&MD
- ♦ Management of the systemic signs and symptoms in children and adolescents with R&MD
- ♦ Know the most frequent causes of cutaneous, ocular and digestive problems in children and adolescents with arthritis.
- ♦ Consider the usefulness of tests to rule out rare causes of arthritis
- ♦ Identify other musculoskeletal symptoms
- ♦ Possess the basic knowledge of normal and pathological musculoskeletal characteristics
- ♦ Adopting a correct diagnostic approach to laxity
- ♦ Adopt a correct diagnostic approach to deformities.
- ♦ Adopt a correct diagnostic approach to gait disturbances.
- ♦ Consider the usefulness of tests to rule out R&MD related to laxity, deformities and gait disturbances.
- ♦ Master pharmacological treatment in Paediatric Rheumatology
- ♦ Obtain sufficient knowledge of the various pharmacological groups used in paediatric Rheumatology.
- ♦ Develop a plan for the prevention of complications.
- ♦ Develop a plan for monitoring complications
- ♦ Be able to identify medication errors
- ♦ Developing a non-pharmacological treatment plan
- ♦ Have the necessary knowledge of psychological approaches to paediatric R&MD's and their families.
- ♦ Adequate knowledge about exercise and physical activity
- ♦ Adequate knowledge of other rehabilitation techniques and their efficacy in specific paediatric R&MD's
- ♦ General knowledge of the indication for orthopaedic surgery
- ♦ General nutritional knowledge for paediatric R&MD's
- ♦ Knowledge about available social resources for paediatric R&MD patients
- ♦ Develop a non-pharmacological treatment plan
- ♦ Identifying advice and misconceptions about non-pharmacological therapies
- ♦ Preventive Activities
- ♦ General knowledge of prevention strategies
- ♦ Develop a prevention plan for children and adolescents with R&MDs
- ♦ Identify indicated and non-indicated vaccines according to specific situations.
- ♦ Understanding the screening and management of osteoporosis in children
- ♦ Have the ability to facilitate the transition to adulthood with juvenile-onset R&MD.
- ♦ Drafting a transition plan for children and adolescents with R&MD
- ♦ Identifying the needs of a transition team
- ♦ Knowledge of the resources available for transition
- ♦ Preparing a transition plan adapted to a specific case
- ♦ Know the existing resources on the internet to help professionals.

04

# Course Management

For our program to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record in the field of education. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.





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*An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your training: a unique opportunity not to be missed”*

## International Guest Director

Dr. Isabelle Koné-Paut is a leading international figure in **Pediatric Rheumatology**, with **innovative contributions** to this field of medicine. As **Head of the Department** of this specialty at the **Kremlin Bicêtre Hospital** in Paris, she leads a team of professionals that has gained **worldwide recognition**, being awarded the **EULAR Excellence Award** on several occasions.

She also directs the **Center for Rare Autoinflammatory Diseases and Inflammatory Amyloidosis**. Within this scope of her professional career, she has coordinated a collaborative effort between five institutions. Through these efforts, she has been able to provide **comprehensive care** for **children and adolescents** struggling with a wide range of specific medical conditions.

Beyond her clinical practice, Dr. Koné-Paut is the author of **multiple scientific publications**. Through these articles, she has made influential contributions to the approach to pathologies such as **Behcet's Disease, Familial Mediterranean Fever, CAPS Syndromes and Kawasaki Disease**. In addition, she has participated in numerous **European and international initiatives** aimed at advancing the understanding of these conditions and their treatments.

She is also the founder of the first **Pediatric Inflammatory Rheumatism Care Network**, based in the French capital. Since then, her premise with this project has been to **improve the accessibility and delivery of healthcare services** for large numbers of children's patients and, at the same time, to **support their families**.

She has also held leadership roles within **various academic associations**. Among other positions, she has been **President of the French Society of Pediatric Rheumatology** and a member of merit of the **French Society of Pediatrics**. In the international framework, she has also had key participations with prestigious scientific groups such as the **International Society for Systemic Autoinflammatory Diseases (ISSAID)**.



## Dr. Isabelle, Koné-Paut

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- ♦ Head of the Department of Pediatric Rheumatology at the Kremlin Bicêtre Hospital, Paris, France
- ♦ Coordinator of the National Center of Reference for Rare Autoinflammatory Diseases (CEREMAI)
- ♦ Professor at the Paris-Saclay University in Saint-Aubin, France
- ♦ Associate Editor of the journals *Frontiers of Pediatrics* and *Frontiers of Immunology*
- ♦ President of the French Society of Pediatric Rheumatology  
Member of: French Society of Pediatrics  
International Society of Systemic Autoinflammatory Diseases

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## Management



### Dr. Carmona, Loreto

- ♦ Rheumatologist and epidemiologist (LIRE). Medical Director InMusc
- ♦ PhD in Epidemiology and Preventive Medicine from the Autonomous University of Madrid.
- ♦ University Research Professor at Camilo José Cela University until 2013.



### Dr. Clemente Garulo, Daniel

- ♦ Degree in Medicine and Surgery from the Faculty of Medicine from the University of Alcalá (1995-2001).
- ♦ Rheumatology consultant, after completing his MIR training at the San Carlos Clinical Hospital in Madrid (2002-2006) and in Paediatrics and Specific fields, after completing his MIR training at the Niño Jesús University Children's Hospital.
- ♦ PhD in Health Sciences from Camilo José Cela University (July 2018)
- ♦ Since October 2010 he has been an Attending Physician in Paediatrics at the University Hospital Niño Jesús, working in the Paediatric Rheumatology Unit.
- ♦ Since September 2016, he has been a lecturer in the Faculty of Health Sciences at the Lasalle Graduate School of Higher Education.



### Dr. De la Torre Hervera, Elisenda

- ◆ Member of the Spanish Rheumatology Association
- ◆ Postgraduate in Patient Advocacy, June 2016 UIC (Universitat Internacional de Catalunya), Barcelona
- ◆ Technical engineer in computer management, June 2000 (Polytechnic University of Mataró (UPC), Barcelona).
- ◆ Patients' Advisory Council of Catalonia (CCPC) 2016 - present}
- ◆ CCPC Communications Technical Advisor 2016 - present day
- ◆ Member of the executive board of administration of the healthcare quality agency (AQuAS) 2017 - present
- ◆ Member of the Pharmaco-Therapy Commission (CFT-SISCAT) 2017 - present

## Professors

### Dr. Bartolomé, Jon

- ◆ Patient representative (LIRE-youth). Member of the Board of Directors. Head of LIRE Youth

### Dr. Benavent, Diego

- ◆ Rheumatology Department at La Paz Hospital, Madrid

### Dr. Boteanu, Alina

- ◆ Paediatric Rheumatologist. Ramón y Cajal Hospital, Madrid

### Dr. Calvo Aranda, Enrique

- ◆ Rheumatology Department. Infanta Leonor University Hospital

### Dr. Diago Ortega, Rocío

- ◆ Dietician - Nutritionist and Director of DcienciaSalud

### Dr. Diaz Valle, David

- ◆ Head of the Ophthalmology Department. San Carlos Clinical Hospital

### Dr. Emperiale, Valentina

- ◆ Department of Rheumatology, Príncipe de Asturias University Hospital
- ◆ Doctor-Surgeon Pontificia Catholic University in Chile

### Dr. Enríquez Merayo, Eugenia

- ◆ Paediatric Rheumatologist at Infanta Leonor University Hospital, Madrid

**Dr. Fernández Berrizbeitia, Olaia**

- ♦ Rheumatologist. Associate Professor

**Dr. Fernández Caamaño, Lucía**

- ♦ Occupational Therapist

**Dr. Galindo, Rocío**

- ♦ Coordinator of the Infantile Osteoporosis and Osteogenesis Imperfecta group.

**Dr. Gómez, Alejandro**

- ♦ Rheumatology Attending Physician. Infanta Sofía University Hospital

**Dr. Graña, Jenaro**

- ♦ Paediatric Rheumatologist

**Dr. Greco, Martín**

- ♦ Rheumatologist Physician

**Dr. Leon, Leticia**

- ♦ Doctor of Psychology. IdISSC Rheumatology. San Carlos Clinical Hospital, Madrid

**Dr Lerma, Sergio**

- ♦ Paediatric Physiotherapist

**Dr. Magallares López, Berta**

- ♦ Rheumatology Consultant Santa Creu I Sant Pau Hospital Associate Professor

**Dr. Martín Bielsa, Laura**

- ♦ Paediatric Rheumatologist. UGC Paediatrics, Regional University Hospital of Malaga, Malaga





**Dr. Nieto, Juan Carlos**

- ◆ Paediatric Rheumatologist

**Dr. Nuñez, Esmeralda**

- ◆ Paediatric Rheumatologist. Coordinator of the Infection Prevention and Treatment in Paediatric Rheumatology group of SERPE and member of the Spanish Society of Paediatric Infectious Diseases (SEIP).

**Dr. Prada Ojeda, Alejandro**

- ◆ Rheumatologist University Hospital Torrejón de Ardoz (Madrid)

**Dr. Redondo, Marta**

- ◆ Psychologist. Camilo José Cela University

**Dr. Ramírez, Ana**

- ◆ Paediatric Traumatologist. Orthopaedic surgery and Traumatology department

**Dr. Sánchez, Judith**

- ◆ Head of Paediatric Rheumatology Unit - Hospital Universitari Parc Taulí Sabadel

**Dr. Salar Ibáñez, Luis**

- ◆ Rheumatology specialist at the Hospital de Torrejon
- ◆ Coordinator of the paediatric Rheumatology unit at the San Rafael Hospital.

**Dr. Vázquez, Ana**

- ◆ Occupational and speech therapist (LIRE)

# 05

## Structure and Content

The contents of this Professional Master's Degree have been developed by the different experts of this program, with a clear purpose: to ensure that our students acquire each and every one of the necessary skills to become true experts in this field. Knowledge that will enable students to respond to each and every one of the needs of a paediatric rheumatology unit.

The content of this program will enable you to learn all aspects of the different disciplines involved in paediatric rheumatology: A complete and well-structured program that will take you to the highest standards of quality and success. The programme is put together with the participation of expert patients, which adds an original and intimate perspective, with real cases and situations that are not only clinical, but also social. It has a holistic perspective, not just a medical one, making it of interest to healthcare professionals of any kind.







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*A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life”*

## Module 1. Approach to a Child with Suspected R&MD

- 1.1. Medical History
  - 1.1.1. Frequent Reasons for Consultation in Paediatric R&MDs
  - 1.1.2. Family Medical History
  - 1.1.3. Patient History
  - 1.1.4. Key Questions in R&MD
  - 1.1.5. Relevant Organs and Systems
  - 1.1.6. Growth and Development
- 1.2. Effective Communication with the Child and Family
  - 1.2.1. Effective Interviewing
  - 1.2.2. Fears and Phobias
- 1.3. Examination of the Locomotor System in Paediatric Rheumatology
  - 1.3.1. Upper Limb Examination
  - 1.3.2. Examination of the Lower Limbs
  - 1.3.3. Spinal Examination
  - 1.3.4. Gait Examination
  - 1.3.5. General Examination Adapted to Rheumatology
- 1.4. Complementary Tests
  - 1.4.1. Imaging
    - 1.4.1.1. X-rays
    - 1.4.1.2. Ultrasound
    - 1.4.1.3. Resonance
    - 1.4.1.4. Others
  - 1.4.2. Laboratory Tests
    - 1.4.2.1. Blood Count:
    - 1.4.2.2. Biochemistry
    - 1.4.2.3. Reactants of the Acute Phase
    - 1.4.2.4. Auto antibodies
    - 1.4.2.5. Serology and Additional Testing
    - 1.4.2.6. Microbiology
    - 1.4.2.7. Genetic Studies
    - 1.4.2.8. Bio-markers
  - 1.4.3. Study of the Synovial Fluid
  - 1.4.4. Clinical Neurophysiology

- 1.5. Multidisciplinary Support
  - 1.5.1. What the Rheumatologist Does
  - 1.5.2. What the Paediatrician Does
  - 1.5.3. What Nurses Do
  - 1.5.4. What the Psychologist Does
  - 1.5.5. What a Physiotherapist Does
  - 1.5.6. What Occupational Therapists Do
  - 1.5.7. What Social Workers Do
- 1.6. What not to do

## Module 2. Musculoskeletal Pain in Children and Adolescents

- 2.1. Understanding Pain
  - 2.1.1. Pain Theories
  - 2.1.2. Feeling Pain
  - 2.1.3. Pain Pathways
- 2.2. Pain Assessment
  - 2.2.1. Pain Characteristics
  - 2.2.2. Measuring the Strength of Pain
  - 2.2.3. Location of Pain
    - 2.2.3.1. Knee Pain
    - 2.2.3.2. Hip Pain
    - 2.2.3.3. Ankle and Foot Pain
    - 2.2.3.4. Neck pain
    - 2.2.3.5. Back pain
    - 2.2.3.6. Shoulder, Elbow and Wrist Pain
    - 2.2.3.7. Generalised Pain
- 2.3. Musculoskeletal Pain in Children
  - 2.3.1. Expression of Pain
  - 2.3.2. Behaviour
  - 2.3.3. The impact of Pain
    - 2.3.3.1. Social Impact
    - 2.3.3.2. Family



- 2.4. Pain Management
  - 2.4.1. Pharmacological Treatment - A General Overview
  - 2.4.2. Non-pharmacological Treatment - a General Overview
- 2.5. What not to do

### Module 3. Musculoskeletal Disorders

- 3.1. Inflammatory Joint Disease
  - 3.1.1. Monoarthritis
    - 3.1.1.1. Most Frequent Causes
    - 3.1.1.2. Diagnostic Approach
    - 3.1.1.3. Therapeutic Approach
  - 3.1.2. Oligoarthritis
    - 3.1.2.1. Most Frequent Causes
    - 3.1.2.2. Diagnostic Approach
    - 3.1.2.3. Therapeutic Approach
  - 3.1.3. Polyarthritis
    - 3.1.3.1. Most Frequent Causes
    - 3.1.3.2. Diagnostic Approach
    - 3.1.3.3. Therapeutic Approach
- 3.2. Inflammation of the Entheses
  - 3.2.1. Most Frequent Causes
  - 3.2.2. Diagnostic Approach
  - 3.2.3. Therapeutic Approach
- 3.3. Muscular Pathology
  - 3.3.1. Inflammatory Myopathies
  - 3.3.2. Non-inflammatory Myopathies
- 3.4. Non-inflammatory Joint Disease
- 3.5. Orthopaedic Pathology
  - 3.5.1. Osteomyelitis
  - 3.5.2. Osteoporosis
  - 3.5.3. Tumours
- 3.6. What not to do

## Module 4. Systemic inflammation

- 4.1. Systemic Symptoms of Inflammation
  - 4.1.1. Fever
  - 4.1.2. Constitutional Syndrome
  - 4.1.3. Fatigue
- 4.2. Eye Disorders with Rheumatological Relevance
  - 4.2.1. Anterior Uveitis
  - 4.2.2. Intermediate Uveitis
  - 4.2.3. Posterior Uveitis
  - 4.2.4. Episcleritis
  - 4.2.5. Refraction Disorders
- 4.3. Skin Alterations with Rheumatological Relevance
  - 4.3.1. Psoriasis
  - 4.3.2. Lesions Suggestive of Connectivopathies
  - 4.3.3. Lesions Suggestive of Autoinflammatory Disease
- 4.4. Digestive Disorders with Rheumatological Relevance
  - 4.4.1. Inflammatory Bowel Disease
  - 4.4.2. Complications of Malnutrition and Malabsorption
- 4.5. Cardiopulmonary, Neurological and Renal Disorders
  - 4.5.1. Cardiopulmonary Disorders
  - 4.5.2. Neurological Disorders
  - 4.5.3. Renal Disorders
- 4.6. What not to do

## Module 5. Other Musculoskeletal Symptoms

- 5.1. Gait Alteration
  - 5.1.1. Movement Analysis
  - 5.1.2. Limping
  - 5.1.3. Converging and Diverging Gait
- 5.2. Hyperlaxity
  - 5.2.1. Frequency
  - 5.2.2. Assessment
  - 5.2.3. Management
- 5.3. Angular and Torsional Deformities in Children
  - 5.3.1. Scoliosis
  - 5.3.2. Joint Contractures and Joint Retraction
    - 5.3.2.1. Infantile Valgus Flatfoot and Forefoot Deformities
    - 5.3.2.2. Clubfoot
  - 5.3.3. Pathology of the Growing Hip
    - 5.3.3.1. Hip Dysplasia
    - 5.3.3.2. Perthes' Disease, Epiphysiolysis Capitisfemoris
- 5.4. Discrepancy in Length of Limbs
  - 5.4.1. Frequency
  - 5.4.2. Assessment.
  - 5.4.3. Management
- 5.5. Sports Injuries
  - 5.5.1. Frequency
  - 5.5.2. Assessment
  - 5.5.3. Management
- 5.6. What not to do

## Module 6. Pharmacological Treatment in Paediatric Rheumatology

- 6.1. Symptomatic Treatments
  - 6.1.1. Analgesics
  - 6.1.2. Anti-inflammatories
  - 6.1.3. Opioids
  - 6.1.4. Antiepileptics
  - 6.1.5. Antidepressants
- 6.2. Targeted Treatments
  - 6.2.1. Disease-modifying Drugs
  - 6.2.2. Biological Evidence
  - 6.2.3. Biosimilars
  - 6.2.4. Small Molecules
- 6.3. Day-to-Day Treatment
  - 6.3.1. Storage of Medical Treatments, Travel
  - 6.3.2. Complications and Adverse Effects
- 6.4. What not to do

## Module 7. Non-pharmacological Treatment and Psychosocial Support

- 7.1. Exercise and Physical Activity in Children
  - 7.1.1. Exercise, Physical Activity, Sports
  - 7.1.2. Exercise Guidelines for Children with R&MD
- 7.2. Rehabilitation
  - 7.2.1. Splints and Braces
  - 7.2.2. Physical Therapies for Children
- 7.3. Orthopaedic Surgery
  - 7.3.1. Special Features of Immature Bones and the Growing Skeleton
  - 7.3.2. Childhood Fractures
    - 7.3.2.1. Most Common Traumatic Fractures and Traumatic Epiphysiolysis
    - 7.3.2.2. Standard Techniques for Osteosynthesis in Children
  - 7.3.3. Management of Locomotive Apparatus Infections in Children
  - 7.3.4. Surgery for Spinal Deformities in the Growing Spine
  - 7.3.5. Pelvic and Upper Extremity Femoral Osteotomies

- 7.4. Nutritional Advice
  - 7.4.1. Obesity
  - 7.4.2. Malnutrition
  - 7.4.3. Supplements
- 7.5. Psychological Approach to Paediatric R&MDs
  - 7.5.1. Fears, Phobias and Anxieties
  - 7.5.2. Generalised Anxiety Disorder and Panic Disorder
  - 7.5.3. Depression in Childhood and Adolescence
  - 7.5.4. Sleep Disorders
  - 7.5.5. Eating Disorders
  - 7.5.6. Antisocial Disorders
  - 7.5.7. Learning Disabilities
  - 7.5.8. Training for Parents of Children with R&MD
  - 7.5.9. Family Behavioural Intervention
- 7.6. Occupational Intervention
  - 7.6.1. Occupational Schedules
  - 7.6.2. Games as Therapy
  - 7.6.3. Assistive Devices
- 7.7. What not to do

## Module 8. Preventive Activities

- 8.1. Vaccines
  - 8.1.1. Official Vaccination - Special Points to Bear in Mind
  - 8.1.2. Extra Vaccination According to Diseases and Treatments
- 8.2. Chemoprophylaxis
  - 8.2.1. What to Do in the Event of Surgery
  - 8.2.2. What to do about Inter Current Infections
- 8.3. Tuberculosis Screening
  - 8.3.1. For Whom
  - 8.3.2. Available Testing
  - 8.3.3. What to Do in Case of a Positive Test Result
- 8.4. Osteoporosis Screening for Children
  - 8.4.1. For Whom
  - 8.4.2. Available Testing
  - 8.4.3. What to Do in Case of a Positive Test Result
- 8.5. Adaptation to the School Environment and Activities of Daily Living
  - 8.5.1. Adaptation to the School Environment
  - 8.5.2. Daily Living Activities
  - 8.5.3. Sibling syndrome
- 8.6. Comorbidity Detection
  - 8.6.1. Hearing impairment
  - 8.6.2. Attention and Concentration Deficits
  - 8.6.3. Voice Problems
- 8.7. What not to do



**Module 9. Transition to Adulthood with Juvenile-Onset R&MD**

- 9.1. Accessing Transition Services and Initiating the Process
  - 9.1.1. Definition of Transition Services
  - 9.1.2. Transition as a Mobile Objective
- 9.2. Transition Policies
  - 9.2.1. Recommendations by the Spanish Group on Transition in R&MD
  - 9.2.2. EULAR Recommendations on Transition in R&MD
- 9.3. Documentation of Transition and Transfer Processes
  - 9.3.1. What Should be Documented in Transitions
  - 9.3.2. How to Document Transfers
- 9.4. The HEADSS Strategy
  - 9.4.1. Definition
  - 9.4.2. Application
- 9.5. Adapting Services to Adolescents
  - 9.5.1. Adapting Language and Communication
  - 9.5.2. How to Transfer Responsibility
- 9.6. Peer-to-Peer Communication
  - 9.6.1. Communication Between Adolescents
  - 9.6.2. Communication Between Professionals
- 9.7. What not to do

**Module 10. "Wiki" of Diseases (Resources to which all Modules are Directed)**

- 10.1. Juvenile Idiopathic Arthritis
  - 10.1.1. Uveitis Associated with Juvenile Idiopathic Arthritis
  - 10.1.2. Macrophage Activation Syndrome
- 10.2. Pain Amplification Syndromes
  - 10.2.1. Juvenile Fibromyalgia
  - 10.2.2. Complex Regional Pain Syndrome
- 10.3. Chronic Musculoskeletal Pain
  - 10.3.1. Growing Pains
  - 10.3.2. Osteochondrosis
  - 10.3.3. Benign Generalised Joint Hyperlaxity

- 10.4. Vasculitis
  - 10.4.1. Henoch-Schönlein Purpura
  - 10.4.2. Kawasaki's Disease
  - 10.4.3. Wegener's Granulomatosis, Takayasu's Arteritis, Churg-Strauss Syndrome and Other Vasculitis
- 10.5. Connectivopathies
  - 10.5.1. Systemic Lupus Erythematosus
  - 10.5.2. Sjögren's Syndrome
  - 10.5.3. MCTD
  - 10.5.4. Antiphospholipid Syndrome
  - 10.5.5. Idiopathic Inflammatory Myopathy
    - 10.5.5.1. Juvenile Dermatomyositis
  - 10.5.6. Scleroderma
    - 10.5.6.1. Localised Scleroderma
    - 10.5.6.2. Systemic Sclerosis
- 10.6. Lysosomal Metabolic Diseases
- 10.7. Bone Diseases
  - 10.7.1. Infantile Osteoporosis
  - 10.7.2. Collagenosis
    - 10.7.2.1. Stickler's Disease
    - 10.7.2.2. Marfan, Ehler-Danlos Syndromes
- 10.8. Autoinflammatory Disorders
  - 10.8.1. PFAPA Syndrome
  - 10.8.2. Hereditary Relapsing Fever Disorders
  - 10.8.3. Other Autoinflammatory Disorders
- 10.9. Osteoarticular Infections
- 10.10. Rheumatic Fever and Post-streptococcal Arthritis
- 10.11. How Diseases are Classified

06

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used 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 Re-learning, 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

In a given situation, what would you do? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can experience a way of learning that is shaking the foundations of traditional universities around the world*



According to Dr. Gervas, 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 potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in professional medical practice.

“

*Did you know that this method was developed in 1912 at Harvard for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”*

The effectiveness of the method is justified by four fundamental achievements:

1. Students 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 is solidly grounded in practical skills, which allow the student to effectively integrate them 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.



## Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analysing cases.



*The physician 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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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

In our program, learning is not a linear process, but rather a spiral (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score of our learning system is 8.01, in line with the highest international standards.



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



#### Study Material

All educational content is created by the specialists who are going to teach the course, specifically for the course, so that the teaching content is highly specific and relevant.

These contents are then applied to the audiovisual format that forms our way of working online, with the latest techniques that allow us to offer high quality, in each of the materials that we make available to you.



#### Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the utmost rigour, explained and detailed for your comprehension and understanding. And best of all, you can watch them as many times as you want.



#### Interactive Summaries

We present the contents in an engaging and dynamic way in multimedia lessons that include audio, videos, images, diagrams and concept maps in order to reinforce knowledge.

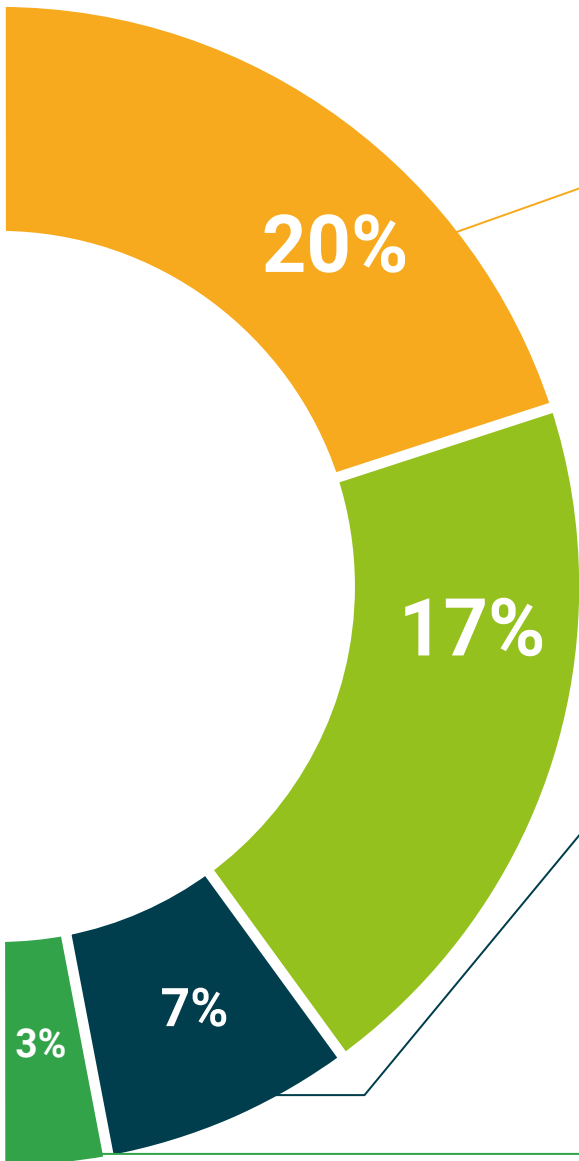
This unique training system for the presentation of multimedia content was recognised by Microsoft as a "European success story".



#### Additional Reading

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





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

Effective learning must necessarily be contextual. Therefore, we will present you with real case developments in which the expert will guide you through the course of care and the outcome of different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and builds the confidence needed to make difficult decisions in the future.



#### Quick Action Guides

We offer the most relevant course content in the form of worksheets or quick action guides. A concise, practical and effective way to help advance the learning process.



# 07 Certificate

The Professional Master's Degree in Update on Pediatric Rheumatology guarantees, 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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*Include in your training a Master's Degree Professional Degree in Update on Pediatric Rheumatology: a high added value qualification for any medical professional"*

This private qualification will allow you to obtain a **Professional Master's Degree diploma in Update on Pediatric Rheumatology** 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** private qualification 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 Update on Pediatric Rheumatology**

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.

future

health

confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

**tech** global  
university

personalized service innovation

knowledge present quality

online training

## Professional Master's Degree

Update on Pediatric  
Rheumatology

development languages

virtual classroom

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

# Professional Master's Degree Update on Pediatric Rheumatology

With scientific endorsement from:

