



# Postgraduate Certificate Inflammatory Arthritis and Degenerative Arthrosis of the Wrist and Hand

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

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## tech 06 | Introduction

The prevalence of inflammatory arthritis and degenerative osteoarthritis of the wrist and hand in patients over 70 years of age is high, especially in women. However, this pathology shows its first signs in people in their 40s. Advances in the management of these diseases have made it possible to correctly determine the treatment both to eliminate pain or rheumatologic hand alternation.

Although it is true that there are consolidated treatments, it is necessary for the specialized medical professional to be aware of the most recent diagnostic and intervention techniques to deal with primary osteoarthritis, rheumatoid or crystal deposition. In this line, this Postgraduate Certificate with an exclusively online methodology allows the surgeon to carry out a complete update in this field in only 6 weeks.

This is an intensive program that takes the student over 150 hours to be aware of general criteria of anatomy and pathophysiology of osteoarthritis in the various joints of the wrist and hand. In addition, thanks to the quality and variety of teaching resources, the graduate will delve thoroughly into the technical details of arthroplasty, arthrodesis and other surgical strategies, either open or arthroscopic.

Also, thanks to the *Relearning* method, based on the reiteration of key content, the physician will not have to invest long hours in study and memorization, consolidating during the course of this itinerary the most important concepts.

Undoubtedly, a unique opportunity to keep up-to-date with the most notorious advances in this field through a flexible program. The student only needs an electronic device with internet connection to visualize, at any time of the day, the content hosted on the virtual platform. An ideal option to combine with the most demanding responsibilities.

This Postgraduate Certificate in Inflammatory Arthritis and Degenerative Arthrosis of the Wrist and Hand contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Upper Limb Surgery, Orthopedic Surgery and Traumatology
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- 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



Get the latest and most rigorous scientific literature on Wrist and Hand Surgery in clinical cases of Arthritis and Osteoarthritis"



Want to stay on top of the most rigorous studies on the diagnosis of Wrist and Hand Osteoarthritis? Do it with the comfort of your cell phone with internet connection"

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

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn 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 during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Learn more about the pathophysiology of Kienböck's disease, the gold standard for its diagnosis and the choice of the best treatment.

Get an update on the most innovative therapeutic strategies in rhizarthrosis thanks to TECH.







## tech 10 | Objectives



## **General Objectives**

- Update knowledge in the different medical and basic specialties surrounding hand pathology
- Determine the types of wound healing, sutures and skin grafts to specify the treatment of less complex wounds; escalating to the management of complex wounds
- Analyze the basic anatomy of the wrist and hand to provide a starting point from which to recognize injuries that may occur after trauma or injury of any kind
- Structure the bony and ligamentous anatomy of metacarpals and phalanges of the hand
- Analyze different surgical approaches to the hand
- Compile current arthroscopic treatment methods
- Establish general criteria for the anatomy and pathophysiology of osteoarthritis in the various joints of the wrist and hand
- Analyze in detail the anatomy of the flexor and extensor tendons of the hand, as well as the detailed development of their vascularization and the biology of tendon healing
- Homogenize knowledge and skills in the pathology of the peripheral nerve of the upper limb and brachial plexus
- Update diagnostic and therapeutic knowledge based on the fundamental principles of nerve and brachial plexus injuries
- Guide the different therapeutic options (conservative and surgical) as well as the appropriate time to perform them
- Examine the different surgical techniques used in the treatment of the different pathologies of the pediatric upper limb

- Delve into the anatomical and pathophysiological knowledge of Dupuytren's disease through physical examination and accurate use of the classification of the disease, to determine the appropriate timing of surgical treatment
- Analyze the surgical techniques available in primary and relapsed Dupuytren's disease and the sequelae of previous treatments
- Show the advantages of ultrasound for daily practice in Traumatology
- Explore occupational hand-wrist injuries
- Develop the latest technological advances in Hand Surgery





## **Specific Objectives**

- Define the basic differential diagnosis of wrist and hand arthropathies
- Obtain a global vision of the Inflammatory Arthropathies to see the differences between them and also to discern the best treatment for each one of them
- Analyze rhizarthrosis, its diagnosis and severity classification and develop the different therapeutic strategies, conservative or surgical
- Identify osteoarthritis of proximal and distal interphalangeal joints, carpometacarpal joints (excluding the thumb, mentioned in another topic) and scapho-trapezio-trapezoid joints
- Develop the known surgical techniques and master their indications and technical details
- Present the degenerative pathology of the triangular fibrocartilage as an important triggering factor of wrist discomfort
- Clarify the pathophysiology of Kienböck's disease, the Gold standard for its diagnosis and be able to classify it in severity, thus being able to choose the best treatment



It delves into the different therapeutic alternatives available to treat osteoarthritis of the fingers and carpometacarpal joints"







## tech 14 | Course Management

## Management



## Dr. Ríos García, Beatriz

- Medical Specialist in Orthopedic Surgery and Traumatology in the Hand and Microsurgery Unit at the Monographic Hospital of Orthopedic Surgery and Traumatology ASEPEYO
- Medical Specialist in Orthopedic Surgery and Traumatology (Dr. Rayo and Amaya Team) at the Hospital San Francisco de Asís
- Resident Tutor at the Hospital ASEPEYO
- Medical Specialist in Hand Surgery (Dr. de Haro Team) at the San Rafael Hospital
- Teacher of Knee, Shoulder, Osteosynthesis, Locomotor System and Ultrasound Pathology Courses
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Member of: Spanish Society of Orthopedic Surgery and Traumatology, Spanish Society of Orthopedic Surgery and Traumatology, Spanish Society of Hand Surgery and Microsurgery



## Dr. Valdazo Rojo, María

- Traumatology and Orthopedic Surgery Service at the Hospital Universitario San Francisco de Asis
- Traumatology and Orthopedic Surgery Area Specialist at the Hospital Fundación Jiménez Díaz
- Specialist in Traumatology and Orthopedic Surgery at the Albacete University Hospital Complex
- Professor of Medicine at the Universidad Alfonso X el Sabio, Madrid
- Professor of Medicine at the Autonomous University of Madrid
- Professor of Medicine at the University of Albacete
- PhD in Medicine and Surgery from the Complutense University of Madrid
- Graduated from the Universidad Autónoma de Madrid

#### **Professors**

## Dr. Rayo Navarro, María Jesús

- Assistant Physician of Orthopedic Surgery and Traumatology at the Hospital Francisco de Asis
- Assistant Doctor of Orthopedic Surgery and Traumatology at Hospital Universitario Príncipe de Asturias
- Doctor in the University Hospital of Getafe
- Degree in Medicine and Surgery from the Autonomous University of Madrid

#### Dr. Alfaro Micó, Joaquín

- Area Specialist Physician at the General Hospital of Albacete in the Hand Surgery Section.
- \* Area Specialist Physician at Hospital Quirón Salud Albacete
- Member of the teaching committee of Hospital General Albacete
- Master's Degree in Clinical and Medical Professionalism, Universidad de Alcalá, Spain
- Master's Degree in Update on Orthopedic Surgery and Traumatology. CEU Cardenal Herrera University
- Master's Degree in Clinical Management, Medical and Health Care Management. CEU Cardenal Herrera University
- Master in Traumatologic Emergencies by CEU Cardenal Herrera University
- Master's Degree in Hand Surgery from the International University of Andalusia
- Member of: Spanish Society of Orthopedic Surgery and Traumatology (SECOT), Castilian-La Mancha Society of Orthopedic Surgery and Traumatology (SCMCOT) and Spanish Society of Hand Surgery (SECMA)

## Dr. Losa Palacios, Sergio

- Medical Specialist of the Hand Surgery Unit of the Albacete University Hospital Complex
- Orthopedic Surgery and Traumatology Physician at the General Hospital of Villarrobledo
- Honorary teaching collaborator of the University of Albacete
- Master in Hand Pathology by the International University of Andalusia
- Master's Degree in Patient Safety and Health Care Quality, Universidad Miguel Hernández
- Master's Degree in Health Law, Universidad de Castilla-La Mancha
- Postgraduate Certificate in Hand Surgery from the Spanish Society of Hand Surgery
- Member of the Spanish Society of Hand Surgery

## Dr. Sánchez González, José

- Assistant Physician of Orthopedic Surgery and Traumatology at the Hospital de Mataró
- · Clinical Chief of the Upper Extremity Unit at Mataró Hospital
- Member of the Teaching Commission at Hospital de Mataró
- Specialist in the Traumatology and Sports Medicine Unit at the GEMA Clinic in Mataró
- \* Specialist in the Trauma Pathology and Shoulder Arthroplasty Unit
- Sports Traumatology Team at the Clínica Creu Blanca
- Specialist in Orthopedic and Trauma Surgery
- Teaching Collaborator at the Mataró Hospital Teaching Unit
- Member of: Catalan Society of COiT (SCCOT), Spanish Society of COT (SECOT) and Commission of tutors of residents of the Catalan Society of Orthopedic Surgery and Traumatology

## tech 16 | Course Management

## Dr. Valdazo Rojo, María

- Traumatology and Orthopedic Surgery Service at the Hospital Universitario San Francisco de Asis
- Traumatology and Orthopedic Surgery Area Specialist at the Hospital Fundación Jiménez Díaz
- Specialist in Traumatology and Orthopedic Surgery at the Albacete University Hospital Complex
- Professor of Medicine at the Universidad Alfonso X el Sabio, Madrid
- Professor of Medicine at the Autonomous University of Madrid
- Professor of Medicine at the University of Albacete
- PhD in Medicine and Surgery from the Complutense University of Madrid
- Graduated from the Universidad Autónoma de Madrid

## Dr. Jiménez Fernández, María

- Specialist in the Traumatology Area at Hospital Costa del Sol
- Clinical tutor at Hospital Costa del Sol, teaching practice and clinical activity to students of the Faculty of Medicine in Malaga
- Teacher of Traumatology courses
- PhD in Orthopedic Surgery and Traumatology from the University of Malaga
- Graduate in Medicine and Surgery from the University of Malaga
- University Master's Degree in Hip and Pelvis Pathology by UNIA





## Course Management | 17 tech

#### Dr. Gallach Sanchís, David

- Specialist in Orthopedic Surgery and Traumatology in the specialized care area of Albacete
- Specialist in Hand Surgery Unit
- Degree in Medicine and Surgery from the Faculty of Medicine and Dentistry of Valencia

## Dr. Font Bilbeny, Mercé

- Assistant Doctor of Orthopedic Surgery and Traumatology in the Upper Extremity Unit at the Hospital de Mataró
- Primary Care Continuity of Care Assessment Coordinator Orthopedic Surgery and Traumatology Specialist
- Medical specialist of the Orthopedic Surgery and Traumatology of the Gabinete de Especialidades Médicas (GEMA)
- \* Teacher collaborator at the Teaching Unit of the Hospital de Mataró
- Action Guide and Protocols for referral from Primary Care to the Orthopedic Surgery and Traumatology Service of the Consorci Sanitari del Maresme
- Degree in Medicine and Surgery from the Universitat Autónoma de Barcelona
- Member of the Upper Extremity Unit of the Orthopedic Surgery and Traumatology Service of the Hospital de Mataró

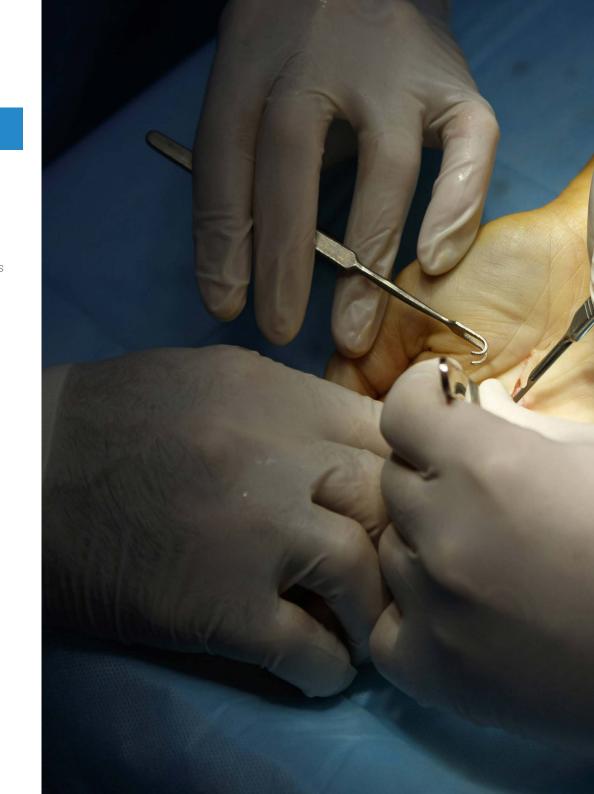




## tech 20 | Structure and Content

## **Module 1.** Inflammatory Arthritis and Degenerative Arthrosis of the Wrist and Hand. Conservative and Surgical Treatment. Evidence

- 1.1. Clinical examination and basic differential diagnosis in arthropathies of the wrist and hand
  - 1.1.1. Etiology of degenerative pathology of the wrist and hand
  - 1.1.2. Clinical examination and complementary diagnostic tests
  - Overview and differential diagnosis of Wrist and hand joint pain.
     Specific Characteristics
- 1.2. Arthrosis of the fingers and carpometacarpal joints, except the thumb. Therapy Options
  - 1.2.1. Metacarpophalangeal arthrosis (excluding the thumb). Etiology, Diagnosis and Treatment
  - 1.2.2. Proximal interphalangeal arthrosis. Etiology, Diagnosis and Treatment
  - 1.2.1. Distal interphalangeal osteoarthritis. Etiology, Diagnosis and Treatment
- 1.3. Rizarthrosis. Assessment, classification and conservative treatment
  - 1.3.1. Anatomy and Physiopathology
  - 1.3.2. Diagnosis. Symptoms and clinical examination. Complementary Tests. Classification
  - 1.3.3. Conservative Treatment
- 1.4. Rizarthrosis. Surgical Management
  - 1.4.1. Suspension arthroplasty. Advantages and Disadvantages Surgeon's preferences
  - 1.4.2. Replacement arthroplasty
  - 1.4.3. Arthrodesis of the trapeziometacarpal joint
- 1.5. Scapho-trapeziometacarpal (STT) arthrosis. Assessment and therapeutic options
  - 1.5.1. Degenerative causes of STT. Primary or secondary involvement
  - 1.5.2. Clinic and diagnosis of osteoarthritis STT
  - 1.5.3. Surgical techniques indicated for STT joint involvement
- 1.6. Treatment of carpal osteoarthritis. Arthrodesis, arthroplasty and other options
  - 1.6.1. Degenerative changes of the carpus. Etiology, classification and diagnosis
  - 1.6.2. Four corner arthrodesis. Proximal Carpectomy. Total wrist arthrodesis
  - 1.6.3. Wrist replacement arthroplasty. Capsular Denervation





## Structure and Content | 21 tech

- 1.7. Degenerative pathology of the triangular fibrocartilage
  - 1.7.1. Anatomy and Physiopathology
  - 1.7.2. Etiology of triangular fibrocartilage lesions. Diagnosis
  - 1.7.3. Treatment and prognosis of triangular fibrocartilage lesions
- 1.8. Kienböck's disease. Pathophysiology, diagnosis, classification and treatment
  - 1.8.1. Anatomy and pathophysiology of Kienböck's disease
  - 1.8.2. Clinical examination and diagnostic tests. Classification
  - 1.8.3. Conservative treatment vs. surgical treatment
- 1.9. Surgical treatment of rheumatoid arthritis in the hand: synovectomies, plastias, arthroplasties and arthrodesis
  - 1.9.1. Synovectomies and plasties in the rheumatoid hand. Indications and Results
  - 1.9.2. Hand and wrist replacement arthroplasty in rheumatoid arthritis
  - 1.9.3. Arthrodesis in the rheumatoid hand. Indications and Results
- 1.10. Similarities and differences in surgical treatment of rheumatoid arthritis and other inflammatory arthropathies: lupus erythematosus, microcrystal deposition diseases
  - 1.10.1. Hand and wrist deformities in systemic lupus erythematosus. Therapeutic Techniques
  - 1.10.2. Microcrystal deposition diseases. Differential diagnosis and treatment of choice
  - 1.10.3. Differences and similarities in the treatment of inflammatory diseases



Inquire through the best didactic material on the treatment and prognosis of triangular fibrocartilage lesions"





## tech 24 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

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



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.



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

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

- Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.





## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

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



## Methodology | 27 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

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

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

## tech 28 | Methodology

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Surgical Techniques and Procedures on Video**

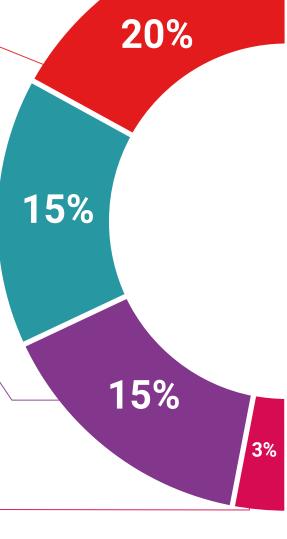
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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



#### **Interactive Summaries**

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

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





#### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

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

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts.

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



#### **Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.









## tech 32 | Certificate

This Postgraduate Certificate in Inflammatory Arthritis and Degenerative Arthrosis of the Wrist and Hand contains the most complete and up-to-date scientific on the market.

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

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

Title: Postgraduate Certificate Inflammatory Arthritis and Degenerative Arthrosis of the Wrist and Hand

Official No of hours: 150 h.



For having passed and accredited the following program

#### POSTGRADUATE CERTIFICATE

in

Inflammatory Arthritis and Degenerative Arthrosis of the Wrist and Hand

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

nique TECH Code: AFWORD23S techtitute.com/o

<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

health

guarantee

technological
university

# Postgraduate Certificate

Inflammatory Arthritis and Degenerative Arthrosis of the Wrist and Hand

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