

# Professional Master's Degree

## Shoulder Surgery





## Professional Master's Degree Shoulder Surgery

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

Website: [www.techtitute.com/us/medicine/professional-masters-degree/shoulder-surgery](http://www.techtitute.com/us/medicine/professional-masters-degree/shoulder-surgery)

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# 01

# Introduction

Shoulder injuries, especially in the rotator cuff, are a frequent problem, which has experienced in recent years a significant improvement in suturing and fixation techniques. This has improved surgeons' ability to repair tendons effectively. The continuous advances in this field lead specialists to keep updating their skills. For this reason, TECH has developed a 100% online program, which will bring professionals up to date in radiological techniques, as well as diagnostic and therapeutic procedures for various pathologies that affect this limb. All this with innovative didactic material, accessible at any time and place, with no time restrictions.







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*You will delve into the most important advances in Shoulder Surgery, keeping you with TECH at the forefront of this specialty.”*

Due to the high incidence of shoulder injuries, especially in the rotator cuff, and their impact on the quality of life of those affected, minimally invasive procedures, surgical techniques and prostheses have been improved in recent years. These advances are accompanied by a constant updating of specialists interested in integrating the most notable advances into their practice.

In this sense, TECH has developed this program, which will allow the professional to have an update on the latest diagnostic advances, as well as therapeutic procedures applied in Shoulder Surgery.

Throughout 12 months of intensive updating, the doctor will explore in depth the different access routes to be used for open surgery, the different arthroscopic entrances and the applied anatomy. In addition, it will delve into the main indications for various radiological techniques such as conventional radiography, computed tomography and arthroCT. To do so, you will have a wide variety of multimedia resources or clinical case studies that will show you various situations you might encounter in your daily practice.

Following this approach, the program is presented in a 100% online format, which will provide the graduate with the possibility to reconcile his or her daily activities with those of updating his or her knowledge. In addition, this methodology combined with the Relearning method will allow you to deepen your knowledge by remembering the most relevant concepts in less time and without investing long hours of study.

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

- ♦ The development of case studies presented by expert orthopedic surgeons
- ♦ 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 self-assessment can be used 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



*With TECH, you will delve into the key points of Shoulder Surgery and improve your surgical skills in this highly specialized area."*

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*In just 12 months you will explore in detail the osteology of the shoulder and update the knowledge necessary to perform successful implants.”*

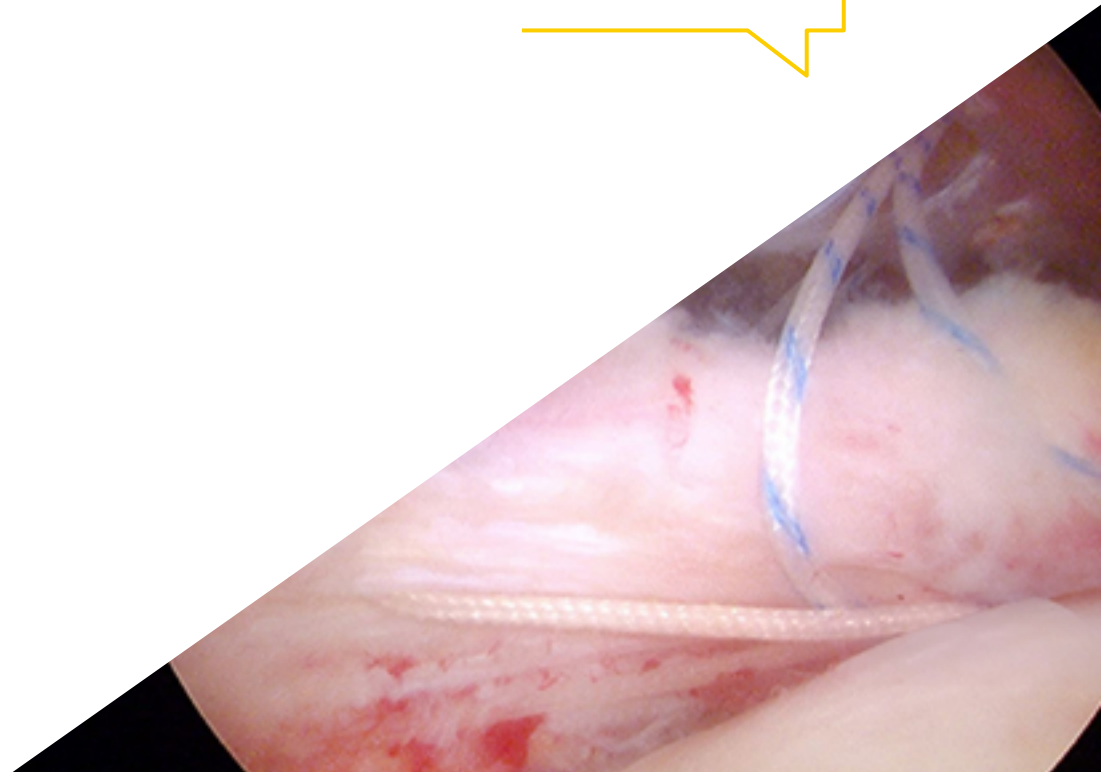
The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

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

*With this Professional Master's Degree program you will learn about arthrology and the ligaments of the shoulder, expanding your clinical skills.*

*He implements the different techniques of shoulder approach and acquires skills in minimally invasive procedures.*



# 02

# Objectives

The purpose of this program is to provide the doctor with the updated knowledge and skills necessary to offer specialized and quality care to patients with shoulder disorders and injuries. In this way, the specialist will focus on deepening the anatomy, physiology and pathology of this joint, as well as mastering the specific surgical techniques used to address these pathologies.







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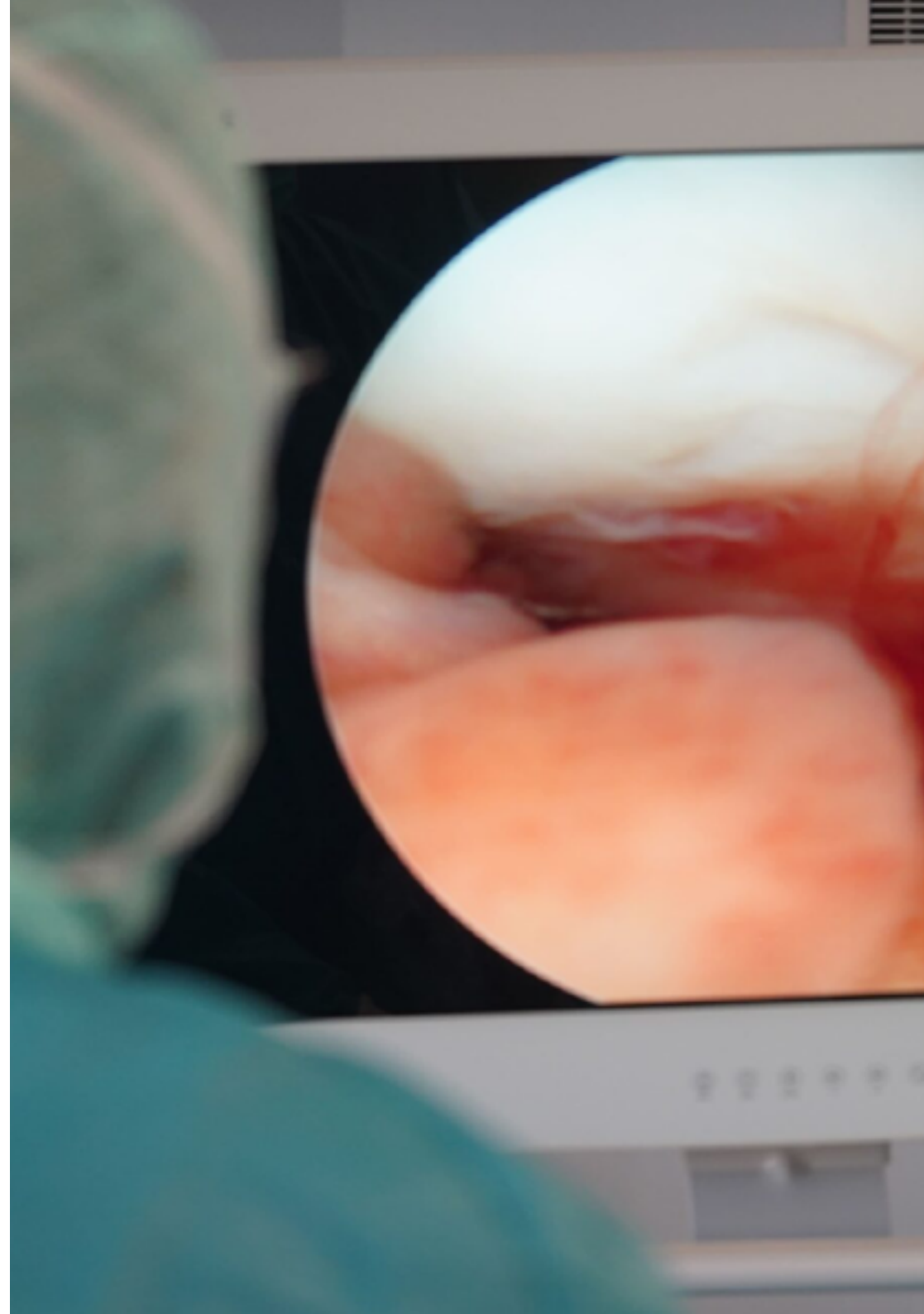
*You will update your knowledge of shoulder arthroscopy and arthroscopic portals to take your surgical practice to another level.”*



## General Objectives

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- ♦ Analyze the macroscopic anatomy of the shoulder
- ♦ Determine the different approaches to open surgery
- ♦ Introducing the arthroscopic portals of shoulder surgery
- ♦ Delve into new technologies in anatomy and shoulder surgery
- ♦ Examine the usefulness of different radiological techniques in the diagnosis of certain shoulder pathologies
- ♦ Define ultrasound scans as a treatment technique in some shoulder pathologies
- ♦ Expose the usefulness of nuclear medicine in shoulder pathology
- ♦ Compile the different objective, subjective and quality of life scales
- ♦ Show embryology of the shoulder
- ♦ Grouping of shoulder pathologies affecting children: dysplasias, fractures and other acquired pathologies
- ♦ Development of rheumatologic, tumor and infectious diseases
- ♦ Deepening the role of anesthesia in the shoulder





## Specific Objectives

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### Module 1. Arthroscopic Approach to the Scapular Belt

- ◆ Compiling the milestones and key points of Shoulder Surgery
- ◆ Delve into on the bony and muscular anatomy of the shoulder
- ◆ Identify the vasculonervous anatomy of the shoulder
- ◆ Examine the approaches used in shoulder surgery
- ◆ Determine the arthroscopic portals used in shoulder surgery
- ◆ To analyze the biomechanics of the Scapular Waist
- ◆ To develop knowledge of new technologies applied to Shoulder Surgery (surgical planning platforms and navigation in Shoulder Surgery, among others)

### Module 2. Radiology, other diagnostic techniques and scales

- ◆ Define the usefulness of plain radiography within the different diagnostic techniques
- ◆ Deepen on the validity of CT and arthroTAC
- ◆ Identify the pathologies that can be diagnosed through the use of MRI and ArthroMRI
- ◆ Analyze ultrasound from a diagnostic and therapeutic point of view
- ◆ Specify the indications for the use of Nuclear Medicine techniques
- ◆ Examine objective and subjective scales in Shoulder

### **Module 3. Congenital, pediatric and rheumatic pathologies, infections and tumors. Anesthesia**

- ♦ Delve into in the embryology of the shoulder
- ♦ Present congenital pathologies affecting the shoulder and acquired pathologies affecting the shoulder in childhood
- ♦ Examine the different rheumatic pathologies affecting the shoulder (villonodular synovitis, among others)
- ♦ Analyze the infections that can affect the shoulder (septic arthritis, among others)
- ♦ Identify tumors that may affect the scapular girdle

### **Module 4. Rotator Cuff I. Subacromial Syndrome and Rotator Cuff Ruptures**

- ♦ Delve into on the macroscopic anatomy of the rotator cuff
- ♦ Develop knowledge of the evolutionary history of patients with degenerative rotator cuff pathology
- ♦ To analyze the different exploratory maneuvers to be used in patients suffering from Rotator Cuff breaks
- ♦ Identify the different patterns of rotator cuff tears
- ♦ To present the different surgical techniques that are indicated for each of the patterns of Rotator Cuff tears

### **Module 5. Rotator cuff II. Calcifying Tendinitis. Stiffness**

- ♦ Delve into the different arthroscopic knotting techniques
- ♦ Interpret the rehabilitative treatment in the postoperative period of rotator cuff tears. Immobilization indications and different types of physiotherapy
- ♦ Master the indications and rehabilitation techniques used in the conservative treatment of rotator cuff disorders
- ♦ Be able to identify and treat complications of rotator cuff repair
- ♦ Address calcifying tendinitis as an entity and develop a therapeutic algorithm

- ♦ Identify and diagnose shoulder stiffness, the different types and its possible coexistence with rotator cuff tears. Therapeutic approach to this pathology
- ♦ Define adhesive capsulitis, predisposing diseases, diagnosis, evolution of the disease, therapeutic algorithm and explanation of the different conservative and surgical treatment techniques
- ♦ Determine how to diagnose glenohumeral internal rotation deficit (GIRD), physical examination, maneuvers and therapeutic algorithm

### **Module 6. Glenohumeral Instability**

- ♦ Delve into the anatomy of the Glenohumeral Joint, including the arthroscopic view
- ♦ Identify hyperlaxity, measure hyperlaxity and know the predisposing diseases
- ♦ Prepare for the measurement of bone defects
- ♦ Expose the different exploratory maneuvers in anterior glenohumeral instability
- ♦ Define microinstability, multidirectional instability and their surgical indications
- ♦ Explain the therapeutic algorithm in anterior, posterior and multidirectional instability
- ♦ Address the possible complications and sequelae of anterior and posterior instability

### **Module 7. Scapulothoracic. Neurological Injuries**

- ♦ Delve into in the anatomy of the scapulothoracic joint
- ♦ Analyze the pectoralis minor hyperactivation syndrome
- ♦ Explain the relationship between the involvement of the serratus anterior nerve and the scapulothoracic joint
- ♦ Present the relationship between trapezius nerve involvement and the scapulothoracic joint
- ♦ Investigate axillary nerve neuropathy, suprascapular nerve neuropathy and define the quadrilateral space syndrome
- ♦ Explore pathologies associated with other processes affecting the scapulothoracic joint



### Module 8. Acromioclavicular, sternoclavicular and long portion of the long portion of the biceps

- ♦ Delve into the anatomy of the acromioclavicular and sternoclavicular joints
- ♦ Analyze the pathology of the sternoclavicular joint
- ♦ Explain the different therapeutic techniques for acute acromioclavicular dislocation
- ♦ Develop therapeutic options after chronic acromioclavicular dislocation
- ♦ Investigate the complications of acromioclavicular dislocation
- ♦ Examine the anatomy of the long portion of the biceps and anatomical variants

### Module 9. Scapular Waist Fractures

- ♦ Address the most commonly used classifications of Proximal Humerus fractures
- ♦ Establish the indications for conservative treatment of proximal humerus fractures and the indications for surgical treatment of proximal humerus fractures: osteosynthesis and arthroplasty
- ♦ Examine the therapeutic indications in dislocation fracture and tuberosity avulsion
- ♦ Analyze the possible complications and sequelae of proximal humerus fractures
- ♦ Determine the classifications of clavicle fractures and indications for conservative treatment
- ♦ Develop the indications and techniques of osteosynthesis in the surgical treatment of clavicle fractures
- ♦ Specify the classifications of scapula fractures and the indications for conservative treatment

### Module 10. Degenerative shoulder

- ♦ Delve into in the scientific evidence in shoulder arthroplasty
- ♦ Investigate primary omarthrosis from the point of view of its etiology, anamnesis and conservative and surgical treatments
- ♦ Master the therapeutic indications in post-traumatic osteoarthritis and expose surgical techniques
- ♦ Address avascular necrosis, etiology and indications for conservative and surgical treatment
- ♦ Define possible traumatic complications and indications for conservative and surgical treatment
- ♦ Expose the mechanical complications and their therapeutic algorithm
- ♦ Develop the subject of infectious complications and their adequate treatment from a multidisciplinary point of view, both medical and surgical



*You will delve into new technologies applied to Shoulder Surgery, such as 3D printing and surgical navigation”*

# 03 Skills

This program will provide the doctor with the skills and faculties required in the field of Shoulder Surgery. In this regard, the practitioner will develop skills to perform a thorough evaluation of Shoulder problems, identify the underlying causes of conditions and make an accurate diagnosis based on physical examination, clinical history and, in some cases, imaging tests. In addition, you will develop skills in developing the most advanced and effective surgical techniques used in shoulder surgery.



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*You will apply state-of-the-art radiological techniques and other diagnostic procedures to carry out accurate treatment of shoulder pathologies”.*

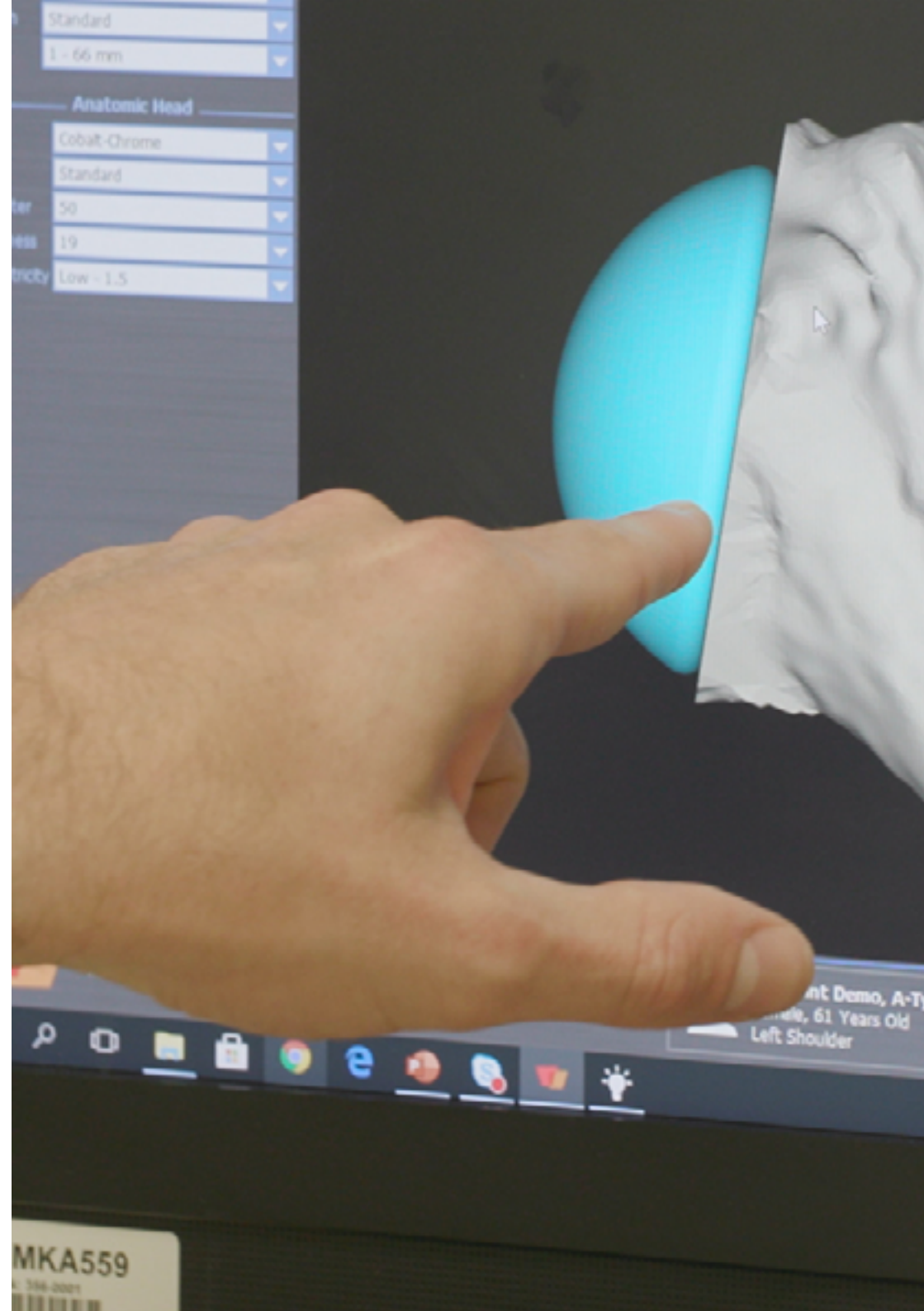


## General Skills

- Analyze the different complications of rotator cuff repair
- Delve into calcifying tendinitis and its therapeutic algorithm
- Identify shoulder stiffness, the different types and its possible coexistence with rotator cuff tears
- Interpretation of adhesive capsulitis, predisposing diseases, diagnosis and therapeutic algorithm
- Define glenohumeral internal rotation deficit (GIRD), exploration and therapeutic approach
- Addressing Rotator Cuff Rupture coexisting with glenohumeral instability
- Recall and deepen the macroscopic anatomy of the Glenohumeral Joint
- Investigate predisposing diseases of hyperlaxity and measurement of hyperlaxity
- Experiment in exploratory maneuvers of glenohumeral instability
- Inquire about the measurement of anterior bone deficit



*Broaden your knowledge of cutting-edge and highly effective techniques in the treatment of chronic acromioclavicular dislocation"*







## Specific Skills

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- Develop knowledge of new technologies applied to shoulder surgery (surgical planning platforms and navigation in shoulder surgery, among others)
- Introduce the quality of life scales in the shoulder
- Investigate the role of anesthesia in procedures affecting the Shoulder
- Elaborate a practical therapeutic algorithm for patients with rotator cuff pathology
- To present rotator cuff tears coexisting with glenohumeral instability, diagnosis and therapeutic algorithm
- Present the different surgical techniques for the rescue of instability surgery, including bone bumper and shoulder arthrodesis as the last step
- Demonstrate the role of rehabilitative treatment in scapulothoracic pathology
- Investigate the different surgical techniques for the treatment of injuries of the long portion of the biceps
- Generate specialized knowledge on the indications for scapula fracture and osteosynthesis techniques in surgical treatment of scapula fractures
- Implement shoulder arthrodesis as a salvage technique for other procedures

04

# Course Management

In order to preserve the academic excellence that distinguishes TECH's degrees, this Professional Master's Degree has a faculty made up of recognized experts in the field of Orthopedic Surgery and Traumatology. These professionals, active in leading hospital centers, have extensive skills in the application of arthroscopic surgical techniques, as well as in the treatment of fractures and dislocations. Therefore, the knowledge updated by the specialist will be aligned with the latest advances in this discipline.



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*You will have at your disposal a teaching staff with whom you will explore in depth the most advanced techniques and cutting-edge technologies used in Shoulder Surgery”*

## Management



### Dr. Ana Belén Fernández Cortina

- ♦ Traumatologist at Cosaga Hospital
- ♦ Traumatologist (Shoulder Visiting Fellow) at the Massachusetts General Hospital
- ♦ Traumatologist at the Ourense University Hospital Complex
- ♦ Traumatologist at Gambo General Rural Hospital
- ♦ Journal Clinical Epidemiology Reviewer Affiliation: Clinical epidemiology
- ♦ Scientific Journal Medical Science Melville USA Reviewer
- ♦ Dr. in Medicine and Surgery from the Complutense University of Madrid
- ♦ Specialist in Orthopedic and Trauma Surgery
- ♦ Degree in Medicine and Surgery from the University of Santiago de Compostela
- ♦ Member of: Spanish Association of Orthopedic Surgery and Traumatology (SECOT), Spanish Society of Shoulder and Elbow Surgery (SEHC), Spanish Association of Arthroscopy (AEA), Spanish Society of Sports Traumatology (SETRADE)





### **Dr. Vanesa López Fernández**

- ♦ Attending Doctor of Orthopedic Surgery and Traumatology, Arthroscopy Unit at the Hospital Rey Juan Carlos
- ♦ Attending Doctor of Orthopedic Surgery and Traumatology at the Jiménez Díaz Foundation Hospital
- ♦ Clinical and research fellowship in shoulder, hand and upper limb surgery at the Clinique Generale d'Annecy
- ♦ Clinical and research fellowship in shoulder and elbow surgery under the supervision of Dr. Emilio Calvo and Dr. Foruria at the Jiménez Díaz Foundation
- ♦ Professor and member of the scientific committee of the CURSOCOT for the training of residents and attendings (recertification courses) in Orthopedic Surgery and Traumatology
- ♦ Honorary Professor of Orthopedic Surgery and Traumatology Universidad Rey Juan Carlos
- ♦ Dr. in Medicine from the University of Santiago de Compostela with a doctoral thesis entitled "Effect of intra-articular hyaluronic acid in experimental synovitis"
- ♦ Degree in Medicine from the Santiago de Compostela University
- ♦ Master's Degree in Orthopedic Surgery and Traumatology from San Pablo CEU University
- ♦ Postgraduate Diploma in Orthopedic Surgery and Upper Limb Traumatology from San Pablo CEU University
- ♦ Postgraduate Diploma in Orthopedic Surgery and Traumatology of the Pelvis, Hip and Pediatric Traumatology from San Pablo CEU University
- ♦ Postgraduate Diploma in Orthopedic Surgery and Traumatology of the knee, ankle and foot by San Pablo CEU University
- ♦ Postgraduate Diploma in Orthopedic Surgery and Traumatology of the Spine, Tumors and Infections, San Pablo CEU University

## Professors

### Mr. Jaime Candal Couto

- ♦ Traumatologist and Orthopaedic Surgeon Upper Limb Specialist, Northumbria Healthcare NHS Trust
- ♦ Shoulder and elbow surgery specialist
- ♦ Head of Upper Limb Surgery Unit, Northumbria Healthcare NHS Trust
- ♦ Regional clinical coordinator of the National Joint Registry
- ♦ Honorary Professor at the University of Teeside
- ♦ Member of: Secretary of the British Shoulder & Elbow Society, Chairman of the National Education Committee of the British Elbow & Shoulder Society (BESS), Council Member of the British Elbow & Shoulder Society (BESS), Member of the National Education Committee of the British Elbow & Shoulder Society (BESS), General Medical Council, Royal College of Surgeons of England, British Orthopaedic Association, British Elbow & Shoulder Society, Medical Protection Society

### Dr. Almudena Beatriz Fernández-Bravo Rueda

- ♦ Associate Chief Doctor of the Rehabilitation Service of the Jiménez Díaz Foundation Hospital
- ♦ Head of the Interventionism and Biological Therapies Unit at the Olympia-qx medical center of the Quirón Health Madrid group
- ♦ Professor of ultrasound in the Professional Master's Degree in Musculoskeletal Ultrasound and Ultrasound-guided Interventionism. Program awarded by San Pablo Ceu University, Andalucía
- ♦ Graduate in Medicine and Surgery from Universidad de Navarra
- ♦ Master's Degree in Aesthetic and Anti-Aging Medicine from the Complutense University of Madrid
- ♦ Member of: Board of Directors of SERMEF and member of the editorial committee of the journal Rehabilitación, Board of Directors of SETOC (Spanish Society of Shockwave Therapy), Pain Care Committee at the Jiménez Díaz Foundation Hospital



**Dr. Sergi Pascual Sánchez**

- ♦ Nephrologist at Consorci Sanitari Alt Penedès-Garraf
- ♦ Psychiatric Monitor at CPB (Serveis Salut Mental)
- ♦ Degree in Medicine from the Autonomous University of Barcelona
- ♦ Degree in Psychology from the Autonomous University of Barcelona
- ♦ Master's Degree in Neurobiology and Behavior of the Superior Institute of Psychology Studies

**Dr. Daniel Moya**

- ♦ Staff Doctor of the Orthopedics and Traumatology Service of the British Hospital of Buenos Aires
- ♦ Traumatologist in San Martín de Tours
- ♦ Honorary Advisor to several hospitals in Argentina
- ♦ Orthopedic and Traumatology Center Valls Orthopedics and Traumatology Center
- ♦ Staff traumatologist at the Sanatorio Finocchietto
- ♦ Traumatologist Emergency Department Emergency Department, Buenos Aires University Hospital
- ♦ Editor-in-Chief of the Journal of Regenerative Science
- ♦ Associate Editor of the Spanish Journal of Orthopedics and Traumatology
- ♦ Former President of the Argentinean and Latin American Society of Shoulder and Elbow Surgery
- ♦ Past President of the World Shock Wave Society
- ♦ Member of: President of the Ibero Latin American, Guatemalan Association of Reconstructive Colombian Orthopedics and Traumatology Society, Board of International Congress of Shoulder and Elbow Surgery

**Dr. Gía Rodríguez Vaquero**

- ♦ Chief of Section of the Arthroscopy Unit at Rey Juan Carlos Hospital
- ♦ Shoulder and Elbow Doctor Specialist at Valle de Henares Hospital
- ♦ Shoulder and Elbow Specialist at Quirón San José Hospital
- ♦ Shoulder and elbow specialist at Villalba General Hospital
- ♦ Adjunct Doctor of the Jiménez Díaz Foundation
- ♦ Assistant Doctor at Asepeyo Hospital
- ♦ Assistant Doctor at Nisa Aravaca Hospital
- ♦ Responsible for Patient Safety at Villalba General Hospital
- ♦ Teaching and Research Coordinator of the General Hospital of Villalba
- ♦ Professor of Nursing at the Madrid Autonomous University
- ♦ Professor of Traumatology at the Faculty of Medicine, Alfonso X el Sabio University
- ♦ Master's Degree in Orthopedic Surgery and Traumatology
- ♦ Degree in Medicine and Surgery, Universidad Complutense de Madrid Member of: PEACS (Professional Education Advisory Committee Spain) from Smith and Nephew
- ♦ Training Member of the Spanish Association of Arthroscopy
- ♦ Secretary of the Matritense Society of Orthopedic Surgery and Traumatology (SOMACOT)

### **Dr. Federico Alfano**

- ♦ Doctor assigned to the Traumatology Service of the Asunción Clinic
- ♦ Chief of the Division of Shoulder and Elbow Surgery at the Luis Pasteur Belgrano Medical Center
- ♦ Head of the Shoulder Team at the Spanish Hospital of Buenos Aires
- ♦ Doctor of the Knee Arthroscopy and Sports Medicine team in the Clinic and Surgeries San Cayetano Sanatorium
- ♦ Chief Resident of Orthopedics and Traumatology at the Spanish Hospital of Buenos Aires
- ♦ The Shoulder and Elbow International Fellowship, en Dallas junto a Dr. Wayne Burkhead, Jr
- ♦ Clinical Reviewer from The Journal of Shoulder and Elbow Surgery
- ♦ Lecturer in different programs on shoulder pathologies
- ♦ Degree in Medicine
- ♦ Medical Degree in the United States - United States Medical Licensing Examination® (USMLE). ECFMG Certified
- ♦ Member of: President of the Argentine Association of Shoulder and Elbow Surgery, Member of the Scientific Committee of the Argentine Society of Shoulder and Elbow Surgery

### **Dr. Albert Ferrando de Jorge**

- ♦ Assistant Doctor of Traumatology and Orthopedic Surgery at the Universitari Sant Joan de Reus Hospital
- ♦ Doctor at the MQ Center
- ♦ Doctor at the Alomar Clinic
- ♦ Doctor at the Monegal Clinic
- ♦ Doctor of Medicine and University of Valencia Surgery

### **Dr. María Pérez Fierro**

- ♦ Associate Chief of the Rheumatology Service of the Rey Juan Carlos Hospital
- ♦ Associate Rheumatologist of the Rheumatology Service of the Hospital de Villalba
- ♦ Associate Rheumatologist, Rheumatology Department, Julio Perrando Hospital
- ♦ Associate Rheumatologist of the Rheumatology Department of the Jiménez Díaz Foundation
- ♦ Alcobendas City Hall Doctor
- ♦ Research Doctor of the Cardiology Department of the Hospital Clínico San Carlos
- ♦ Specialist in Rheumatology at the Fundación Jiménez Díaz
- ♦ Master's Degree in Autoimmune Diseases from the University of Barcelona
- ♦ Degree in Medicine and Surgery from the National Northeastern University
- ♦ Postgraduate Certificate in Advanced Studies in Internal Medicine and Immunology from the Complutense University of Madrid

### **Dr. Alexandre Lázaro Amorós**

- ♦ Head of Shoulder, Elbow and Hip Unit at MC Mutual
- ♦ Founder Amorós Institute of Traumatology
- ♦ Professor: Master's Degree in Sports Traumatology, University of Barcelona
- ♦ Consultant Stryker Ibérica in Medical Education
- ♦ Dr. in Medicine and Translational Research from the University of Barcelona
- ♦ Degree in Medicine from the Autonomous University of Barcelona
- ♦ Diploma in Advanced Studies (DEA) Program of Doctorate in Surgery and Surgical Specialties from the University of Barcelona
- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital Clinic of Barcelona



**Dr. Fierro Porto Fierro Porto**

- ♦ Chief of the Shoulder and Elbow Section at Santa Fe Foundation of Bogotá
- ♦ Orthopedic Doctor Shoulder and Elbow Surgeon
- ♦ Advanced Fellow Training in Shoulder and Elbow Surgery by Santa Fe Foundation of Bogotá
- ♦ Medical Degree from the University of Colombia
- ♦ Member of: Shoulder and Elbow Committee of the International Society of Orthopaedic Surgery and Traumatology (SICOT), Secretary General of the Latin American Shoulder and Elbow Society. SLAHOC, President of the Colombian Shoulder and Elbow Society. SCCOT Affiliate, Vice President of the Colombian Shoulder and Elbow Society. Subsidiary SCCOT

**Dr. Paul Patiño**

- ♦ Arthroscopic Surgeon and Traumatologist at Angel Foianini Clinic
- ♦ General Director and head surgeon of the arthroscopic surgery team of Artrocentro
- ♦ Arthroscopic Surgeon and Traumatologist at Private Bank Health Fund and Incor Clinic
- ♦ Orthopedic surgeon specialized in shoulder and elbow pathology
- ♦ Surgeon from the Universidad Mayor of San Simón
- ♦ Postgraduate Certificate in Arthroscopic Surgery from the National Autonomous University of Mexico
- ♦ Postgraduate Certificate in Articular Surgery and Arthroscopy from the National Autonomous University of Mexico
- ♦ High Specialization Program in Shoulder Surgery of the Catholic University of Buenos Aires
- ♦ Research Fellow in Arthroscopic Surgery and Sports Medicine

**Dr. María Luz Cánovas Martínez**

- ♦ Anesthesiologist of CHU Ourense
- ♦ Head of the Pain Section
- ♦ Anesthesiology, Resuscitation and Pain Specialist
- ♦ Lecturer in doctoral programs at the University of Vigo
- ♦ Lecturer at the European University Miguel de Cervantes and the Catholic University of Valencia
- ♦ Doctor of Medicine, University of Santiago de Compostela
- ♦ Degree in Medicine from the Santiago de Compostela University
- ♦ Accreditation in Radiofrequency Techniques Basic and Advanced Levels
- ♦ Accreditation in Pain Ultrasound Basic and Advanced Levels

**Dr. Rui Claro**

- ♦ Chief of the Shoulder Unit of the University Hospital Center of Santo António
- ♦ Orthopedic Specialist in the Department of Orthopedics of CHUdSA
- ♦ Coordinator of the Shoulder and Elbow Section of the Portuguese Society of Orthopedics and Traumatology
- ♦ Lecturer in the discipline of Orthopedics at ICBAS at the University of Porto
- ♦ Degree in Medicine from the University of Oporto
- ♦ Member of: President of the Portuguese Shoulder and Elbow Society, Portuguese National Delegate of the European Society of Shoulder and Elbow Surgery (SECEC-ESSSE), Member of the Registry Committee of the SECEC-ESSSE, Member of the Portuguese Society of Orthopedics and Traumatology (SPOT), Member of the SECEC-ESSSE, Member of the SPOC, Member of the SPOT, Member of the Portuguese Medical Society

#### **Dr. Cristina Casado Pérez**

- ♦ Nuclear medicine specialist at the Rey Juan Carlos Hospital in Móstoles
- ♦ Radiodiagnostic specialist in the musculoskeletal radiology section of the 12 de Octubre University Hospital
- ♦ Member of the head and neck and endocrinology committee at Hospital Rey Juan Carlos de Móstoles
- ♦ Degree in Medicine from the Faculty of Medicine of the University of Oviedo

#### **Dr. Diana Morcillo-Barrenechea**

- ♦ Assistant Doctor in the Traumatology and Orthopedic Surgery Service at Ibermutua
- ♦ Assistant Doctor in the Shoulder and Elbow Unit of the Traumatology and Orthopedic Surgery Department at the Jiménez Díaz Foundation
- ♦ Volunteering in the Traumatology Service as support after earthquake in Nepal
- ♦ Volunteering with Doctors of the World in the Traumatology and Orthopedic Surgery Service in Palestine
- ♦ Specialist in Orthopedic and Trauma Surgery
- ♦ Degree in Medicine from the University of Valladolid
- ♦ Recognition of Research Sufficiency in the area of Microbiology at the University of Valladolid
- ♦ Member of: Spanish Society of Orthopedic Surgery and Traumatology, Spanish Society of Shoulder and Elbow Surgery, Spanish Association of Arthroscopy

#### **Dr. Fernando Amor Gámez**

- ♦ Assistant Doctor in the Rehabilitation Service at the Osteoarticular Pathology Unit of the Rey Juan Carlos University Hospital
- ♦ Specialist in non-surgical pathology at the Hip Unit of University Clinic of Navarra based in Madrid
- ♦ Professional Master's Degree in Musculoskeletal Ultrasound and Interventional Ultrasound by the San Pablo Andalucía CEU Foundation
- ♦ Master's Degree in Clinical Medicine from the Camilo José Cela University
- ♦ Degree in Medicine from Universidad Rey Juan Carlos

#### **Dr. Rodríguez del Real, Maria Teresa**

- ♦ Specialist in Orthopedic Surgery and Traumatology, subspecialty in children at the Getafe University Hospital
- ♦ Specialist Doctor in the area of child Traumatology on call at the Niño Jesús University Hospital
- ♦ Visiting fellowship en Imprefect Osteogenesis en el Sheffield Children's Hospital
- ♦ Teacher of Orthopedic Surgery and Traumatology internship students at the Madrid European University
- ♦ Teacher for pediatricians at the Niño Jesús University Children's Hospital
- ♦ Lecturer in the Master's Degree in Orthopedics for Children. Degree in Medicine from the Madrid Autonomous University
- ♦ Master's Degree in Orthopedics for Children by the CEU Cardenal Herrera University
- ♦ Master's Degree in Assimilation and Resolution of Clinical Cases in Medicine from the University of Alcalá, Spain
- ♦ Member of: Spanish Society of Pediatric Orthopedics (SEOP), Spanish Society of Orthopedic Surgery and Traumatology (SECOT)

**Dr. Gonzalo de Cabo Tejerina**

- ♦ Sports Doctor at Olympia Clinic
- ♦ Head of the Arthroscopy and Upper Limb Unit at the Rey Juan Carlos Hospital in Móstoles
- ♦ Stryker and Depuy Mitek International Medical Consultant
- ♦ Honorary Professor at the Universidad Rey Juan Carlos
- ♦ Degree in Medicine from Universidad Complutense Madrid
- ♦ Diploma of Advanced Studies from Universidad Complutense Madrid

**Dr. Iker Castaño Pérez**

- ♦ Doctor of the Traumatological Rehabilitation Unit at the Hospital Universitario Rey Juan Carlos
- ♦ Doctor of the Vestibular Rehabilitation Unit at the Rey Juan Carlos University Hospital
- ♦ Interventionalist Rehabilitation Service of Hospital Gómez Ulla
- ♦ Doctor at the Children's Rehabilitation Unit of the Rehabilitation Service of the Gregorio Marañón General University Hospital
- ♦ Degree in Medicine from the University of Navarra
- ♦ Diploma in ultrasound diagnosis of Locomotor System injuries. Level A and B
- ♦ Lecturer in the Master's Degree in Electrotherapy in Rehabilitation Medicine at the TECH Technological University

**Dr. Juan Arturo Hurtado Chávez**

- ♦ Traumatologist at the San Gabriel Clinic
- ♦ Traumatologist at Luis Alberto Barton Thompson Hospital
- ♦ Traumatologist at Providencia Clinic
- ♦ Traumatologic Emergency Care Doctor at San Bernardo Clinic
- ♦ Health Officer and Chief of the Medical Department, Peruvian Navy
- ♦ Teacher in Undergraduate, Internship and Residency in Orthopedics and Traumatology at the Mayor Santiago Távara Naval Medical Surgery Center
- ♦ Speaker at SLAOT Forums
- ♦ Fellow in Shoulder Surgery from the University of Geneva
- ♦ Orthopedic Surgeon from the San Marcos National Higher University
- ♦ Medical Surgeon, Tacna Private University
- ♦ Postgraduate degree in Orthopedic Surgery and Traumatology from the San Marcos National Higher University

**Dr. Gonzalo Moreno Zamarro**

- ♦ Assistant Radiodiagnostic Doctor at Jiménez Díaz Foundation University Hospital
- ♦ Teaching collaborator at Madrid Autonomous University
- ♦ Training to operate X-Ray facilities for medical diagnostic purposes
- ♦ Degree in Medicine and Surgery from San Pablo CEU University
- ♦ Master's Degree in Clinical Reasoning and Practice by the CTO Academy and University of Alcalá

### **Dr. Fraga Collarte, Manuel**

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

### **Dr. María Brotat Rodríguez**

- ♦ Specialist Orthopedic Surgery and Traumatology Doctor at Infanta Elena University Hospital
- ♦ Traumatology and Orthopedic Surgery Specialist: Palencia Medical Clinic
- ♦ Traumatology and Orthopedic Surgery Specialist Specialist, Palencia University Welfare Complex
- ♦ Traumatology and Orthopedic Surgery Specialist at Our Lasy of Sonsoles Hospital
- ♦ Specialist in Traumatology and Orthopedic Surgery at Valladolid University Clinical Hospital
- ♦ Traumatology and Orthopedic Surgery Traumatology and Orthopedic Surgery Teaching Collaborator Infanta Elena University Hospital
- ♦ Teaching collaborator of the Department of Anatomy at the University of Valladolid
- ♦ Teaching collaborator with family doctors in the Palencia University Welfare Complex
- ♦ Fellowship in shoulder and elbow University College London Hospital/St. John and St. Elisabeth hospital
- ♦ Degree in Medicine from the Complutense University of Madrid
- ♦ Postgraduate degree in Biomedical Sciences from the Madrid Complutense University
- ♦ Master's Degree in Knee Pathology from the International University of Andalusia
- ♦ Master's Degree in Shoulder Pathology from the International University of Andalusia



**Dr. Marta Navarro Bosch**

- ◆ Specialist in Orthopedic Surgery and Traumatology, Shoulder and Elbow Unit, La Fe University Hospital
- ◆ Specialist in Orthopedic Surgery and Traumatology at Casa de Salud Hospital
- ◆ Specialist in Orthopedic Surgery and Traumatology at the Malva-Rosa Hospital
- ◆ Traumatology and Orthopedic Surgery teacher at Pre-Mir Academy
- ◆ Teacher in the National Plan of Shoulder and Elbow Surgery of the SECHC
- ◆ Degree in Medicine and Surgery from the University of Valencia

**Dr. Eduardo González Hernández**

- ◆ Hand Surgery Specialist
- ◆ Fellow for the American Academy of Orthopaedic Surgeons
- ◆ Fellow Microsurgery at Chang Gung Memorial Hospital
- ◆ Master's Degree from the University of Texas
- ◆ Hand Surgeon by the Hand Center of San Antonio
- ◆ Hand Surgeon, Plastic and Reconstructive Surgery, Stanford University Medical Center
- ◆ Medical Degree from the University of Texas
- ◆ Diploma by the American Board of Orthopaedic Surgeons
- ◆ Member of: American Academy of Orthopaedic Surgeons, American Association of Hand Surgeons, AOA, Medical Honor Society, Board of Directors of the American Fracture Association, Former President of the Hand Federation, Mexican Society of Hand Surgery of the West, Argentine Association of Hand Surgery

**Dr. Ulrike María Novo Rivas**

- ◆ Assistant Radiodiagnostic Doctor at the Jiménez Díaz Foundation University Hospital
- ◆ Assistant Doctor of Radiodiagnosis at the Gregorio Marañón University Hospital
- ◆ Assistant Radiodiagnostic Doctor at the Jiménez Díaz Foundation University Hospital
- ◆ Medical Specialist in Occupational Medicine in a national prevention society
- ◆ Clinical teaching collaborator of Medicine at the Madrid Autonomous University
- ◆ Clinical teaching collaborator of Medicine at the Complutense University of Madrid
- ◆ Degree in Medicine from the Santiago de Compostela University
- ◆ Master's Degree in Occupational Risk Prevention
- ◆ Postgraduate Diploma in Musculoskeletal Ultrasound by the Francisco de Vitoria University

**Dr. Carolina Pisanti López**

- ◆ Head of shoulder clinic at Children's Orthopedic Hospital
- ◆ Specialty in Traumatology and Orthopedics at Dr. Domingo Luciani Hospital
- ◆ Surgeon, Central University of Venezuela. José María Vargas School, Dr. José María Vargas Hospital
- ◆ Master in Public Health
- ◆ Fellow in the Subspecialty of Shoulder Pathologies by Santa Casa de Misericordia
- ◆ Fellow in Shoulder Pathology and Prosthetics from the University of Texas
- ◆ Member of: Venezuelan Society of Traumatology and Orthopedics, Latin American Society of Orthopedic Surgery and Traumatology, World Orthopedic Society

### Dr. Andrés Abellán Albert

- ♦ Radiodiagnostic Specialist in the musculoskeletal radiology section at the Jiménez Díaz Foundation University Hospital
- ♦ Radiodiagnostic Specialist in the musculoskeletal radiology section at the Jiménez Díaz Foundation University Hospital
- ♦ External rotation Doctor in Musculoskeletal Radiology at the Rey Juan Carlos University Hospital, Madrid
- ♦ External rotation Doctor in Musculoskeletal Radiology at the Jiménez Díaz Foundation University Hospital
- ♦ External rotation Doctor in Musculoskeletal Radiology at Hospital Asepeyo Coslada
- ♦ Degree in Medicine and Surgery from the Francisco de Vitoria University
- ♦ Master's Degree in Clinical Reasoning and Clinical Practice, Alcalá University

### Dr. Ignacio de Rus Aznar

- ♦ Specialist Doctor at the Hospital Olympia Quirón Salud
- ♦ Specialist Doctor at the Beata María Ana Hospital
- ♦ Specialist Doctor at HM Sanchinarro Hospital
- ♦ Fellowship in Shoulder and Elbow Surgery at the Hospital Ramón y Cajal
- ♦ Doctor of Medicine from the Alcalá de Henares University
- ♦ Master's Degree in Medicine, Complutense University of Madrid
- ♦ Degree in Medicine from the Complutense University of Madrid
- ♦ Member of: Spanish Society of Orthopedic Surgery and Traumatology SECOT, Spanish Association of Arthroscopy AEA, Spanish Society of Sports Traumatology SETRADE, European Society of Shoulder and Elbow Surgery SECHC

### Dr. Byron Torres

- ♦ Orthopedic Orthopedic Traumatologist Doctor
- ♦ Doctor in Hospital Metropolitano, Hospital Vozandes, Hospital De Los Valles, Salud S.A., Ecuasanas S.A
- ♦ Professor of the Orthopedics and Traumatology Postgraduate Course of the P.U.C.E
- ♦ Professor of the Orthopedics and Traumatology Postgraduate Course of the Loja National University / Pichincha Clinic
- ♦ Professor of the International Course on Sports Traumatology
- ♦ Professor of the Orthopedics and Traumatology Postgraduate Course of the Loja National University / Pichincha Clinic
- ♦ Professor of the International Course on Sports Traumatology
- ♦ Fellow in Shoulder and Elbow Reconstructive and Arthroscopic Surgery at the Humanist Center and Concordia Hospital
- ♦ Fellow in Shoulder and Elbow Reconstructive and Arthroscopic Surgery at Imbanaco Medical Center
- ♦ Fellowship in Knee Surgery and Sports Medicine by the Latin American Society of Arthroscopy
- ♦ Medical Degree from Central University of Ecuador
- ♦ Doctor of Medicine and Surgery, School of Medicine
- ♦ Specialist in Orthopedics and Traumatology from the International University of Ecuador
- ♦ Member of: Founder of the Ecuadorian Society of Shoulder and Elbow Surgery, American Academy of Orthopedics of Traumatology AAOS, Ecuadorian Society Of Traumatology, Latin American Society Of Knee Arthroscopy And Sports Traumatology S.L.A.R.D

**Dr. Jaime León Ezagüi Bentolila**

- ◆ Doctor in the Shoulder and Elbow Unit at the Hospital de la Santa Creu i Sant Pau
- ◆ Arthroscopy and shoulder and elbow surgery Doctor at El Pilar Hospital
- ◆ Doctor in the Arthroscopy and Shoulder Surgery Unit at Mataró Hospital
- ◆ Doctor in the Shoulder and Elbow Unit at Egarsat Hospital
- ◆ Doctor at the Shoulder and Elbow Unit at Aptima Centre Clínic
- ◆ Doctor at Clínica Sagrada Familia
- ◆ Attending Doctor at the Arthroscopy and Arthroplasty Unit of the Santa María de Lleida Hospital
- ◆ Lecturer in the Master's Degree in Upper Extremity at the Barcelona Autonomous University
- ◆ Teaching Member of the Academy of the Spanish Society of Arthroscopy
- ◆ Host of the European Arthroscopy Traveling Fellowship of ESSKA
- ◆ Co-founder of the Fellowship Barcelona training internship platform
- ◆ Visiting Fellowship in Shoulder Surgery at the Reading Shoulder Unit
- ◆ Specialist in Orthopedic Surgery and Traumatology, Barcelona Autonomous University
- ◆ Medical Degree from Universidad Central de Venezuela
- ◆ Member of: Spanish Society of Orthopedic Surgery (SECOT), Spanish Society of Shoulder and Elbow Surgery (SECHC), European Society of Sports Traumatology, Knee Surgery and Arthroscopy (ESSKA), Shoulder Section (ESA) of the ESSKA, Spanish Arthroscopy Association (AEA)

**Dr. Daniel Rojas Castillo**

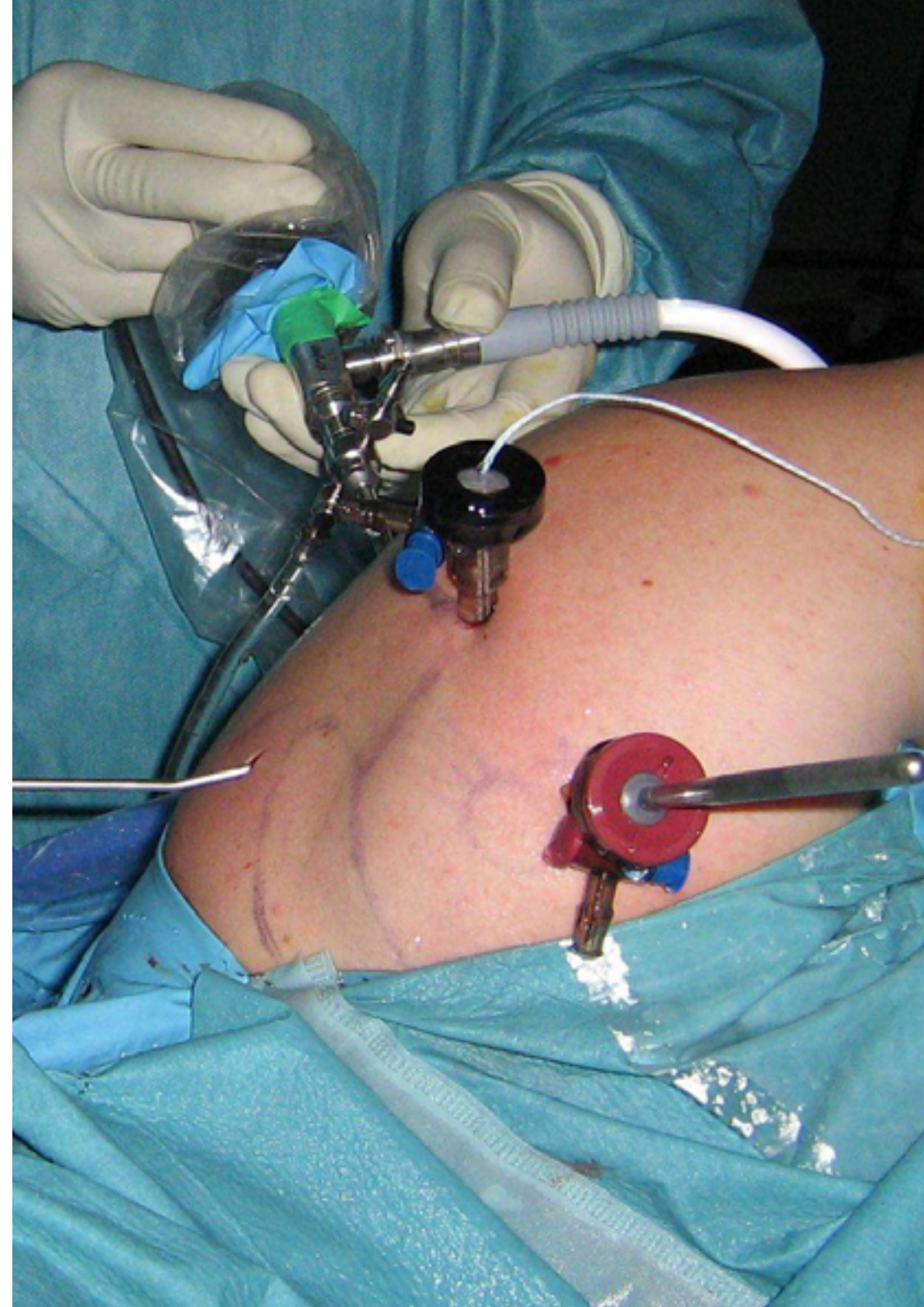
- ◆ Staff of the Shoulder and Elbow Team of the Regional Hospital of Talca
- ◆ Staff of the Clínica Shoulder and Elbow Team
- ◆ Specialist in Orthopedic Surgery and Traumatology, Universidad de Concepción
- ◆ Travelling Fellowship by the German and Latin American Shoulder and Elbow Society
- ◆ Observership in the Department of Orthopedics at Thomas Jefferson University
- ◆ Master's Degree in Shoulder Pathology International University of Andalusia
- ◆ Medical Surgeon from the University of Cuenca
- ◆ Member of: Chilean Society of Orthopedics and Traumatology, Latin American Shoulder and Elbow Society, Scientific Committee of the Latin American Shoulder and Elbow Congress, Latin American Society of Arthroscopy, Knee and Sports Medicine, International Society of Arthroscopy, Knee Surgery and Orthopedic Sports Medicine

**Dr. Luisa Fernanda León Ramírez**

- ◆ Nuclear Medicine specialist at the Rey Juan Carlos Hospital in Móstoles
- ◆ Head of Radioguided Surgery at the Rey Juan Carlos Hospital in Móstoles
- ◆ Nuclear Medicine Specialist at the San Carlos Clinical Hospital
- ◆ Extremadura Health Service Continuous Care Plan in Don Benito
- ◆ Pediatric Emergency Doctor at the Cardio Infantil Foundation
- ◆ General Practitioner at the University Hospital Clínica San Rafael
- ◆ Professor and coordinator of the Nuclear Medicine course at the School of Diagnostic Imaging Technicians
- ◆ Collaborating Doctor in the Department of Nuclear Medicine of the Rey Juan Carlos Hospital
- ◆ Degree in Medicine from Universidad Colegio Mayor Nuestra Señora del Rosario Bogotá

**Dr. Sergio Froylán Santiago Garnica**

- ♦ Traumatologist and Orthopedist at Hospital General Regional 180
- ♦ Orthopedist and Traumatologist assigned to the General Hospital of the Zone
- ♦ Sports Traumatology Doctor for the Universidad del Valle Mexico American Football Team
- ♦ Coordinator of the Shoulder and Elbow Module of the Medical College of Orthopedics and Traumatology of Jalisco
- ♦ Professor at congresses and conferences of Orthopedics and Traumatology of the Mexican College of Orthopedics and Traumatology
- ♦ Full professor of high specialty training in Shoulder and Knee Articular Surgery at Hospital General Regional 180
- ♦ Full Professor of Orthopedics and Traumatology Residency at Hospital General Regional 180
- ♦ Specialty in Traumatology and Orthopedics by the Mexican Institute of Social Security and the Ignacio Garcia Tellez National Medical Center
- ♦ Specialty in Traumatology and Orthopedics from the Autonomous University of Yucatan
- ♦ High Specialty in Shoulder and Elbow Joint Surgery by the Institute of Shoulder & Elbow Surgery and the Autonomous University of Guadalajara
- ♦ High Specialty in Shoulder and Elbow Joint Surgery by the Autonomous University of Guadalajara
- ♦ Training in Musculoskeletal Ecosonography by the Autonomous University of Guadalajara
- ♦ Master's Degree in Education from the Instituto Tecnológico de Estudios Superiores de Monterrey
- ♦ Surgeon, National Autonomous University of Mexico
- ♦ SLAOT Order of Merit with the rank of Knight of the Federation of Latin American Orthopedic and Traumatology Societies and Associations and Associations of Latin American Orthopedics and Traumatology





- ♦ Member of: Mexican Federation of Colleges of Orthopedics and Traumatology, Federation of Latin American Societies and Associations of Orthopedics and Traumatology, Medical College of Orthopedics and Traumatology of Jalisco, Mexican Association of Reconstructive Joint Surgery and Arthroscopy

#### **Dr. Juan Aguilar González**

- ♦ Specialist in Orthopedic Surgery and Traumatology, Upper Limb Surgery in Union of Mutuals
- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital Vithas Valencia
- ♦ Medical Specialist in Orthopedic Surgery and Traumatology at the La Fe University and Polytechnic Hospital, Valencia
- ♦ Medical Specialist in Orthopedic Surgery and Traumatology at the La Fe University and Polytechnic Hospital, Valencia
- ♦ Teacher: Project Elite 2022 Training Race: Sports Medicine Smith&Nephew
- ♦ Clinical and Research Fellowship in Shoulder and Elbow Surgery at the Jiménez Díaz Foundation University Hospital
- ♦ Specialization in Arthroscopic Surgery by the Francisco de Victoria University
- ♦ Master's Degree in Integration and Clinical Problem Solving in Medicine from the University of Alcalá, Spain
- ♦ Doctor and Surgeon from the Vicente Mártir Catholic University of Valencia
- ♦ Expert in Shoulder Surgery by the Spanish Society of Shoulder and Elbow Surgery
- ♦ Member of: European Board of Orthopedics and Traumatology FEBOT, European Society for Surgery of the Shoulder and Elbow SECEC-ESSE Associate Member, AoTrauma Europe Member, Sociedad Española de Cirugía de Hombro y Codo SEHC, Asociación Española de Artroscopia AEA, Comité Paciente Multidisciplinar Paciente Politraumatizado

#### **Dr. Iván Navas Clemente**

- ♦ Medical Specialist in Internal Medicine at the Hospital Universitario Rey Juan Carlos
- ♦ Assistant Doctor of the Emergency Department at the University Hospital of Fuenlabrada
- ♦ Residency in Internal Medicine at the University Hospital of Fuenlabrada
- ♦ Lecturer associated with the Faculty of Medicine of the Rey Juan Carlos University
- ♦ Master's Degree in Infectious Diseases and Antimicrobial Treatment from Cardenal Herrera University
- ♦ Degree in Medicine from the University of Alcalá de Henares

#### **Dr. Sara Luna Infante Ruiz**

- ♦ Assistant Doctor of Physical Medicine and Rehabilitation at the Jiménez Díaz Foundation University Hospital
- ♦ Specialist in Physical Medicine and Rehabilitation at the Virgen del Rocío University Hospital
- ♦ Doctor in the Musculoskeletal Rehabilitation Unit, Spinal Cord Injury and Cranioencephalic Trauma, Amputee Patient, Prosthesis and Orthosis, Cardiorespiratory, Pelvic Floor, Children, Spine and Vestibular at the Virgen del Rocío University Hospital
- ♦ Doctor in the Musculoskeletal, Vestibular, Interventional, Amputee, Prosthesis and Orthosis, Spine and Pain Rehabilitation Unit at the Jiménez Díaz Foundation University Hospital
- ♦ Clinical tutor for medical students of the Physical Medicine and Rehabilitation course at the Faculty of Medicine of Seville
- ♦ Teaching collaborator of resident doctors and medical students of the UAM in the Rehabilitation Service of the Fundación Jiménez Díaz Hospital
- ♦ Degree in Medicine and Surgery from the University of Córdoba

**Dr. Fiona Ashton**

- ◆ Specialist in Orthopedics and General Surgery
- ◆ Upper Limb Specialist
- ◆ Specialist in Pediatric Orthopedics
- ◆ Spine Surgery Specialist
- ◆ Foot and Ankle Surgery Specialist
- ◆ Specialist in Hand and Wrist Surgery
- ◆ Specialist in Shoulder and Elbow Surgery
- ◆ Postgraduate in Research by MD Medical Sciences
- ◆ Medical Degree from the University of Edinburgh

**Dr. Isabel García Bullón**

- ◆ Doctor specializing in Orthopedic Surgery and Traumatology at Ibermutua Central Services
- ◆ Specialist Doctor at Dr. Palazón S.A.P. Clinic (La Luz Clinic)
- ◆ Head of the Hand and Wrist Surgery Unit at Severo Ochoa University Hospital
- ◆ Specialist Doctor in Orthopedic Surgery and Traumatology, University Hospital Severo Ochoa
- ◆ Specialist in Orthopedic Surgery and Traumatology at the Severo Ochoa University Hospital
- ◆ Degree in Medicine from the Complutense University of Madrid

**Dr. Juan Miguel Valles Salima**

- ◆ Attending Doctor Specialist, Shoulder and Elbow Clinic, Orthopedic Children's Hospital
- ◆ Adherent University Professor of Universidad de Oriente
- ◆ Professor, Fellowship in Shoulder and Elbow Surgery, Children's Orthopedic Hospital
- ◆ Specialist in Orthopedic Surgery and Traumatology, Central University of Venezuela
- ◆ Surgeon from the University of Zulia

- ◆ Shoulder and Elbow Fellowship by the Children's Orthopaedic Hospital
- ◆ Member of: Venezuelan Committee of Shoulder and Elbow Surgery, Vice President of the Latin American Shoulder and Elbow Society

**Dr. Julia Serra**

- ◆ Orthopedic Surgery and Traumatology Doctor at the Hospital de la Santa Creu i Sant Pau
- ◆ Resident Doctor at the CAP Garrotxa during the COVID-19 pandemic
- ◆ Doctor AT Mútua Asepeyo at the Badalona health care center
- ◆ Degree in Medicine, with mention in Clinical Surgery from the Autonomous University of Barcelona

**Dr. Yolanda Bracamonte López**

- ◆ Internist in Clinical Neurophysiology at the Rey Juan Carlos University Hospital, Madrid
- ◆ Doctor of the Rural and Urban Marginal Urban Health Service at the Primary Care Health Center of the National Health Police of Ventanilla
- ◆ Degree in Medicine from the Cayetano Heredia Peruvian University
- ◆ Member of: Spanish Society of Clinical Neurophysiology, Spanish Sleep Society, Multidisciplinary Sleep Committee of the Rey Juan Carlos University Hospital, Rey Juan Carlos University Hospital Facial Paralysis Committee

**Dr. Óscar Alberto Vásquez Gamarra**

- ◆ Head of the Upper Limb Unit at the Lima Este Vitarte Hospital
- ◆ Attending Doctor of Traumatology at the Jesús del Norte Clinic
- ◆ Attending Doctor in Traumatology at the Santa María del Sur Clinic
- ◆ Traumatology Attending Doctor at the C.M.I: Dr. Enrique Martin Altuna
- ◆ Attending Doctor in the Emergency Assisted Transportation System-STAE

- ♦ Attending Doctor at C.M.I.:Dr. Enrique Martin Altuna
- ♦ Attending Doctor at the Policlínico María Graña O, Surco
- ♦ Professor, Faculty of Human Medicine, Piura University
- ♦ Doctor in Orthopedics and Traumatology, Ricardo Palma University
- ♦ Master's Degree in Hand and Upper Extremity Surgery from the Autonomous University of Barcelona
- ♦ Surgeon from the University of Mendoza
- ♦ Diploma in Medical Emergencies from San Luis Gonzaga University
- ♦ Diploma in Quality Management of Health Services from the Universidad Nacional Daniel Alcides Carrión

#### **Dr. Antía Río Gómez**

- ♦ Anesthesiologist and Pain Management at COSAGA
- ♦ Anesthesiologist at the University Hospital Complex of Ourense - CHUO
- ♦ CHUO
- ♦ Resident tutor at CHUOU
- ♦ Degree in Medicine from the Santiago de Compostela University
- ♦ Anesthesia, Resuscitation and Pain Therapeutics

#### **Dr. Marta Galván Ortiz de Urbina**

- ♦ Doctor in the Rehabilitation Service at the Rey Juan Carlos University Hospital
- ♦ Doctor in the Rehabilitation Service at the Jiménez Díaz Foundation University Hospital
- ♦ Doctor in the Pelvic Floor Unit and Rehabilitation Service at the 12 de Octubre University Hospital
- ♦ Doctor in the Rehabilitation Service at the State Reference Center for Brain Injury Care
- ♦ Doctor in the Rehabilitation Service at the State Reference Center for Brain Injury Care

- ♦ Doctor in the Children's Rehabilitation Service at the Gregorio Marañón University General Hospital
- ♦ Doctor in the Interventional Rehabilitation Unit and the Rehabilitation Service at the Gómez Ulla Hospital
- ♦ Doctor in the Rehabilitation Service at the National Hospital for Paraplegics
- ♦ Doctor in the Cardiac Rehabilitation Unit and the Cardiology and Rehabilitation Service at the Ramón y Cajal University Hospital
- ♦ Specialist in Physical Medicine and Rehabilitation at the San Carlos de Madrid University Hospital Clinic
- ♦ Clinical Teaching Collaborator at the Madrid Complutense University
- ♦ Honorary Tutor of the Department of Medical Specialties and Public Health of the Rey Juan Carlos University
- ♦ Master's Degree in Medical Assessment of Disability and Bodily Injury for Social Protection by UNED (Spanish National University of Distance Education)
- ♦ Master's Degree in Clinical Phoniatrics from CEU San Pablo University
- ♦ Master's Degree in Electrotherapy in Rehabilitating Medicine at the Technological University TECH
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid

#### **Dr. Nuria Álvarez Benito**

- ♦ Assistant Doctor of Orthopedic Surgery and Traumatology at the University Hospital of the Canary Islands
- ♦ Doctor in the Rehabilitation Service at the Jiménez Díaz Foundation University Hospital
- ♦ Doctor at the Children's Traumatology and Orthopedics Unit at the CHU Lapeyronie de Montpellier
- ♦ Doctor in the Musculoskeletal Tumors Unit and Vascular Surgery and Plastic Surgery Services at the La Paz University Hospital

- ♦ Doctor in the Neurosurgery Service and Spine Unit of the COT service at the Gregorio Marañón University Hospital
- ♦ Lecturer in the program of Microsurgery for COT Residents
- ♦ Specialist Doctor in Orthopedic Surgery and Traumatology
- ♦ Master's Degree in Shoulder Pathology from the International University of Andalusia (UIA)
- ♦ Degree in Medicine from the Complutense University of Madrid
- ♦ Member of: Spanish Society of Orthopedic Surgery and Traumatology, Andalusian Society of Traumatology and Orthopedics

#### **Dr. Cristina González Roiz**

- ♦ Nuclear Medicine Specialist at the Rey Juan Carlos Hospital in Móstoles, Spain
- ♦ Associate Chief of Nuclear Medicine at the Rey Juan Carlos Hospital
- ♦ Doctor at the San Carlos Clinical Hospital
- ♦ Responsible for training at the School of Diagnostic Imaging Technicians
- ♦ Lecturer in the Department of Nuclear Medicine at the Rey Juan Carlos Hospital
- ♦ Degree in Medicine from the University of Oviedo

#### **Dr. Ana Alfonso Fernández**

- ♦ Resident Medical Intern in Orthopedic Surgery and Traumatology at the Marqués de Valdecilla University Hospital
- ♦ Area Specialist at the University Hospital of Álava
- ♦ Area Specialist Doctor at Sierrallana Hospital
- ♦ Fellowship in Upper Extremity Surgery at the University of Ottawa
- ♦ Area Specialist Doctor at the Marqués de Valdecilla University Hospital

- ♦ Associate Professor in the Department of Medical and Surgical Sciences. Orthopedic Surgery and Traumatology of the University of Cantabria
- ♦ Degree in Medicine and Surgery from the University of Santiago de Compostela
- ♦ Doctor of Medicine, University of Cantabria, Spain
- ♦ Member of: Spanish Society of Orthopaedic Surgery and Traumatology (SECOT)

#### **Dr. Víctor Naula**

- ♦ Director of the Integral Miniinvasive & Arthroscopic Center
- ♦ Director of the Comprehensive Shoulder Arthroscopic Improvement Center
- ♦ Chief of the Traumatology and Orthopedics Service of the Clínica María Auxiliadora
- ♦ Associate Doctor at San Jacinto Orthopedic and Traumatology Department
- ♦ Doctor of Medicine and Surgery
- ♦ Specialist in Traumatology and Orthopedics
- ♦ Shoulder and Knee Arthroscopic and Open Shoulder and Knee Surgeon
- ♦ Bachelor of Medicine, State University of Medical Sciences
- ♦ Fellowship Hospital San Gerardo of Monza
- ♦ Fellowship Shoulder Surgery Center Forli
- ♦ Fellowship Arthroscopic and Open Shoulder Surgery
- ♦ Member of: Italian Arthroscopy Society, Ecuadorian Arthroscopy Group, Latin American Society of Arthroscopy, Knee and Sports, Guayas Medical and Surgical Society, American Academy of Orthopaedic Surgeons, Ecuadorian Society of Orthopedics and Traumatology

**Dr. Sergio Andrés Jaramillo Pérez**

- ♦ Traumatologist at Mutua El Rosario Universal Hospital
- ♦ Assistant Doctor in the Traumatology Service of the Hospital Rey Juan Carlos
- ♦ Traumatologist at Hospital QuironSur Alcorcón
- ♦ Traumatologist at the Ibermedic Clinics in Móstoles and Villaviciosa de Odon
- ♦ Surgeon at the Orthopedic and Traumatology Unit of La Princesa University Hospital
- ♦ Doctor of the Emergency and Hospitalization Service at the San Juan de Dios Clinic
- ♦ Emergency Department Doctor at the El Rosario Clinic
- ♦ Degree in Medicine from the San Martín University Foundation
- ♦ Member of: Spanish Society of Orthopedic Surgery and Traumatology (SECOT), Spanish Association of Arthroscopy (AEA), Spanish Society of Orthopedic Surgery and Traumatology (SECOT)

**Dr. Ziba Ghazizadeh Monfared Croigny**

- ♦ Specialist in Clinical Neurophysiology at the Rey Juan Carlos University Hospital, Madrid
- ♦ Specialist in Clinical Neurophysiology at the General Hospital of Villalba
- ♦ Specialist in Clinical Neurophysiology at the Jiménez Díaz Foundation University Hospital
- ♦ Specialist in Clinical Neurophysiology at the Virgen Macarena University Hospital
- ♦ Specialist in Clinical Neurophysiology at the Mérida Hospital
- ♦ Specialist in Clinical Neurophysiology at the Virgen del Rocío University Hospital
- ♦ Honorary Tutor at the Universidad Rey Juan Carlos
- ♦ MIR teaching collaborator Honorary tutor at Rey Juan Carlos University
- ♦ Master's Degree in Physiology and Sleep Medicine from the University of Murcia
- ♦ Degree in Medicine from the University of Zaragoza

- ♦ Member of: Spanish Society of Clinical Neurophysiology, Multidisciplinary Unit of Facial Paralysis HRJC, Multidisciplinary Committee of Neuromuscular Diseases HRJC

**Dr. Tomás Luis Quintero Antolín**

- ♦ Specialist in Orthopedics and Traumatology
- ♦ Traumatologist Specialist in Mutua Gallega
- ♦ Area Specialist Doctor at the Vigo Hospital Complex
- ♦ Doctor in the Orthopedic Surgery and Traumatology Unit at the Meixueiro Hospital in Vigo
- ♦ Degree in Medicine and Surgery from the University of Santiago de Compostela
- ♦ Diploma of Advanced Studies by the University of Vigo
- ♦ Diploma of the European Board of Orthopedics and Traumatology
- ♦ Diploma in Management of Musculoskeletal Tumors by SECOT
- ♦ Member of: Spanish Society of Shoulder and Elbow Surgery, Upper Limb Unit of the University Hospital Complex, Bone and Soft Tissue Tumors Unit of the University Hospital Complex of Vigo, Interdisciplinary Committee of Sarcomas of the University Hospital Complex of Vigo, Commission of the external catastrophe plan of the University Hospital Complex of Vigo, Spanish Technical Team of Emergency Aid and Response, Galician Society of Orthopedic Surgery and Traumatology SOGACOT



#### **Dr. Luis Ariel Texidor Roberts**

- ♦ Specialist in Orthopedics and Traumatology at the National Institute of Traumatology  
Dr. Manninger Jenő Baleseti Központ
- ♦ General Doctor at the Faculty of Medicine of the University of Medical Sciences of Havana  
Calixto García Iñiguez
- ♦ Medical specialist in Orthopedic Surgery and Traumatology by the Ministry of Health
- ♦ Doctor of Medicine by the Ministry of Education, Culture and Sports
- ♦ Specialist in Orthopedics and Traumatology from the University of Semmelweis
- ♦ Specialist in General Comprehensive Medicine from the "Isla de la Juventud" University of Medical Sciences of Havana
- ♦ Specialist in Orthopedics and Traumatology at ScOIC Frank País and Hospital Militar Central Dr. Luis Días Soto
- ♦ Master's Degree in Hand and Upper Extremity Surgery from the Autonomous University of Barcelona
- ♦ General Practitioner from the University of Semmelweis
- ♦ Member of: Barcelona College of Doctors

#### **Dr. Carlos Maia Dias**

- ♦ Healphant Co-Founder and Chief Medical Officer
- ♦ Orthopedic Surgeon - Head of Shoulder and Elbow Unit at CUF Tejo Hospital
- ♦ Orthopedic Surgeon - Head of the Shoulder and Elbow Unit at CUF Santarém Hospital
- ♦ Orthopedic Surgeon - Chief of the Shoulder and Elbow Unit at UCMA
- ♦ Doctor in Bioengineering
- ♦ Doctor of Medicine - Specialist in Orthopedic Surgery
- ♦ Postgraduate degree in Sports Medicine from the Portuguese Society of Sports Medicine
- ♦ Member of: President of the Portuguese Shoulder and Elbow Society, European Council of Orthopedics and Traumatology

#### **Dr. Pablo Andrés Di Giacomo**

- ♦ Staff Doctor in Upper Limb Surgery at Sanatorio Trinidad de Palermo
- ♦ Doctor in the Health Department of the Argentine Naval Prefecture Welfare Department
- ♦ Upper Extremity Surgeon at the Virreyes Clinic
- ♦ Staff Doctor in Upper Extremity Surgery and outpatient service at the Julio Méndez Sanatorium
- ♦ Head of Upper Limb Surgery Team at OPSA - FATSA
- ♦ Upper Limb Surgeon at the Ateneo Sanatorium
- ♦ Traumatologist at the Emergency Medical Clinic Belgrano Branch

- ♦ Outpatient Traumatologist at the Trinidad Sanatorium
- ♦ Staff Doctor in Upper Limb Surgery at Centro Traumatologico del Oeste
- ♦ A.A.O.T. Certified Orthopedic and Traumatology Doctor
- ♦ Medical Auditor at the German Hospital
- ♦ Traumatology and Orthopedics Resident Instructor at the Dr. Julio Méndez Sanatorium
- ♦ Chief Resident of Traumatology and Orthopedics at the Sanatorio Dr. Julio Méndez
- ♦ University Specialist in Shoulder and Elbow Surgery
- ♦ University Specialist in Medical Auditing
- ♦ Specialist in Orthopedics and Traumatology by the Argentine Association of Orthopedics and Traumatology
- ♦ Specialist in Orthopedics and Traumatology by the National Ministry of Health
- ♦ Postgraduate Degree in Medical Auditing from the Argentine Catholic University (UCA)
- ♦ Postgraduate Degree in Extracorporeal Shock Waves from the Argentine Catholic University (UCA)
- ♦ Postgraduate Degree as Shoulder and Elbow Surgeon Specialist from the Argentine Catholic University (UCA)
- ♦ Postgraduate Degree as Shoulder and Elbow Surgeon Specialist from the Argentine Catholic University (UCA)
- ♦ Medical Degree from the University of Buenos Aires
- ♦ Fellowship in Hand Surgery
- ♦ Fellowship in Hand Surgery at the Center for Traumatology, Orthopedics and Rehabilitation (CTO)

#### **Dr. Salcuta Chalco, Abraham**

- ♦ Traumatology and Orthopedics Physician at Nuestra Señora de La Paz Hospital
- ♦ Expert in Sports Knee Injuries
- ♦ Expert in Reconstructive and Orthoplastic Surgery
- ♦ Expert in shoulder and upper limb infiltrations
- ♦ Specialist in Orthopedics and Traumatology
- ♦ Medical Degree from the Universidad Mayor de San Andrés

#### **Dr. Azmetoy Gallego, Juan**

- ♦ Shoulder and Elbow Surgeon at the Jiménez Díaz Foundation Hospital
- ♦ Expert in Shoulder and Elbow Surgery
- ♦ Specialist in Orthopedic Surgery and Traumatology at La Paz University Hospital in Madrid
- ♦ Degree in Medicine from the Autonomous University of Madrid

05

# Structure and Content

The agenda of this program encompasses a wide variety of relevant concepts related to Shoulder Surgery. In this way, the specialist will be kept up to date on the latest advances in radiography, tomography and magnetic resonance techniques. He will also delve into the phylogeny of the shoulder and the rheumatic diseases that affect it. In addition, content will be available to physicians in multimedia formats, such as interactive summaries and simulations of real cases. In addition, physicians will be able to access this content 100% online, without having to adhere to specific schedules.





“

*Through the Relearning method you will experience a decrease in study hours and strengthen your long-term understanding significantly”*

## Module 1. Arthroscopic Approach to the Scapular Belt

- 1.1. Shoulder Surgery
  - 1.1.1. Shoulder Surgery
  - 1.1.2. Shoulder Surgery Milestones
  - 1.1.3. Key points of Shoulder Surgery
- 1.2. Shoulder Osteology
  - 1.2.1. The Humerus. Osteology relevant to Shoulder Surgery
  - 1.2.2. The Scapula. Osteology relevant to the realization of scapula implants
  - 1.2.3. The collarbone
- 1.3. Glenohumeral joint: arthrology, capsule and ligaments
  - 1.3.1. Glenohumeral Joint Arthrology
  - 1.3.2. Joint Structures Relevant to Shoulder Surgery Treatment
  - 1.3.3. Capsule of the Glenohumeral Joint, clinical relevance
  - 1.3.4. Ligaments of the Glenohumeral Joint, clinical relevance
- 1.4. Acromioclavicular, sternoclavicular and scapulothoracic joints
  - 1.4.1. Acromioclavicular joint: Relevant Structures for Surgical Treatment
  - 1.4.2. Sternoclavicular joint
  - 1.4.3. Scapulothoracic joint: Relevant aspects in the diagnosis and treatment of the pathology
- 1.5. Muscles of the shoulder girdle
  - 1.5.1. Glenohumeral muscles
  - 1.5.2. Scapulothoracic Muscles
  - 1.5.3. Muscles involved in various joints
  - 1.5.4. Landmark Muscles
- 1.6. Innervation and vascularization of the shoulder
  - 1.6.1. Relation of Shoulder Innervation and Vascularization to Arthroscopic Approaches and Portals
  - 1.6.2. Shoulder innervation
  - 1.6.3. Shoulder Vascularization
- 1.7. Shoulder Biomechanics
  - 1.7.1. Relation of Shoulder Biomechanics to Current Surgical Techniques
  - 1.7.2. Advanced Shoulder Biomechanics
  - 1.7.3. Physiology of Shoulder Movements

- 1.8. Shoulder approach routes
  - 1.8.1. Relevant Structures for Shoulder Surgical Approaches
  - 1.8.2. Shoulder approach routes
  - 1.8.3. Minimally invasive approaches to the Shoulder
- 1.9. Shoulder arthroscopy. Arthroscopic portals and applied anatomy
  - 1.9.1. Shoulder Arthroscopy
  - 1.9.2. Arthroscopic portals
  - 1.9.3. Applied Anatomy in Shoulder Arthroscopy
- 1.10. New technologies applied to Shoulder Surgery
  - 1.10.1. 3D printing of bone structures
  - 1.10.2. Surgical planning platforms
  - 1.10.3. Custom-made implants
  - 1.10.4. Shoulder Surgery Navigation

## Module 2. Radiology, other diagnostic techniques and scales

- 2.1. Radiography in the Diagnosis of Shoulder Pathology
  - 2.1.1. Radiography as an initial study in shoulder pathology
  - 2.1.2. Indication of radiography in pathology of the shoulder
  - 2.1.3. Radiographic projections of the shoulder
- 2.2. Computed Axial Tomography (CT) and ArthroTAC in the Diagnosis of Shoulder Pathology
  - 2.2.1. CT and arthroCT
  - 2.2.2. CT in Shoulder Pathology
  - 2.2.3. ArthroTAC in the pathology of the shoulder
- 2.3. Magnetic Resonance Imaging (MRI) in Shoulder Pathology
  - 2.3.1. Magnetic Resonance Imaging (MRI) for the study of the shoulder
  - 2.3.2. MRI in traumatic shoulder pathology
  - 2.3.3. MRI in non-traumatic shoulder pathology
- 2.4. ArthroMRI in Shoulder Pathology
  - 2.4.1. ArthroMRI in Shoulder Pathology
  - 2.4.2. ArthroRMN in Shoulder Instability
  - 2.4.3. ArthroRMN in rotator cuff tears



- 2.5. Diagnosis by ultrasound. Eco-guided Techniques
  - 2.5.1. Ultrasound. Principles of Ultrasound Study of the Shoulder
  - 2.5.2. Ultrasound in the pathology of the shoulder
  - 2.5.3. Ultrasound-guided techniques in shoulder pathology
- 2.6. Nuclear Medicine in Shoulder Pathology
  - 2.6.1. Important Aspects
    - 2.6.1.1. Planar Gammagraphic and SPTECT CT images
    - 2.6.1.2. PET-CT
  - 2.6.2. Conventional Nuclear Medicine in Infectious Pathology
    - 2.6.2.1. Bone scan
    - 2.6.2.2. Labeled leukocyte scintigraphy and bone marrow scintigraphy
  - 2.6.3. Clinical PET-CT Applications
- 2.7. Neurophysiology
  - 2.7.1. Neurophysiology
  - 2.7.2. Neurophysiology in the Locomotor System
  - 2.7.3. Neurophysiological diagnosis of the most frequent injuries of the shoulder girdle
- 2.8. Objective Scales in Shoulder Pathology
  - 2.8.1. Objective scale
  - 2.8.2. Objective scales in Shoulder Pathology
  - 2.8.3. Applications of objective scales in shoulder pathology
- 2.9. Subjective Scales in Shoulder Pathology
  - 2.9.1. Subjective scale
  - 2.9.2. Objective scales in Shoulder Pathology
  - 2.9.3. Applications of subjective scales in shoulder pathology
- 2.10. Quality of life scales. Applications in Shoulder Pathology
  - 2.10.1. Quality of life scale
  - 2.10.2. Quality of life scales in shoulder pathology
  - 2.10.3. Applications of quality of life scales in shoulder pathology

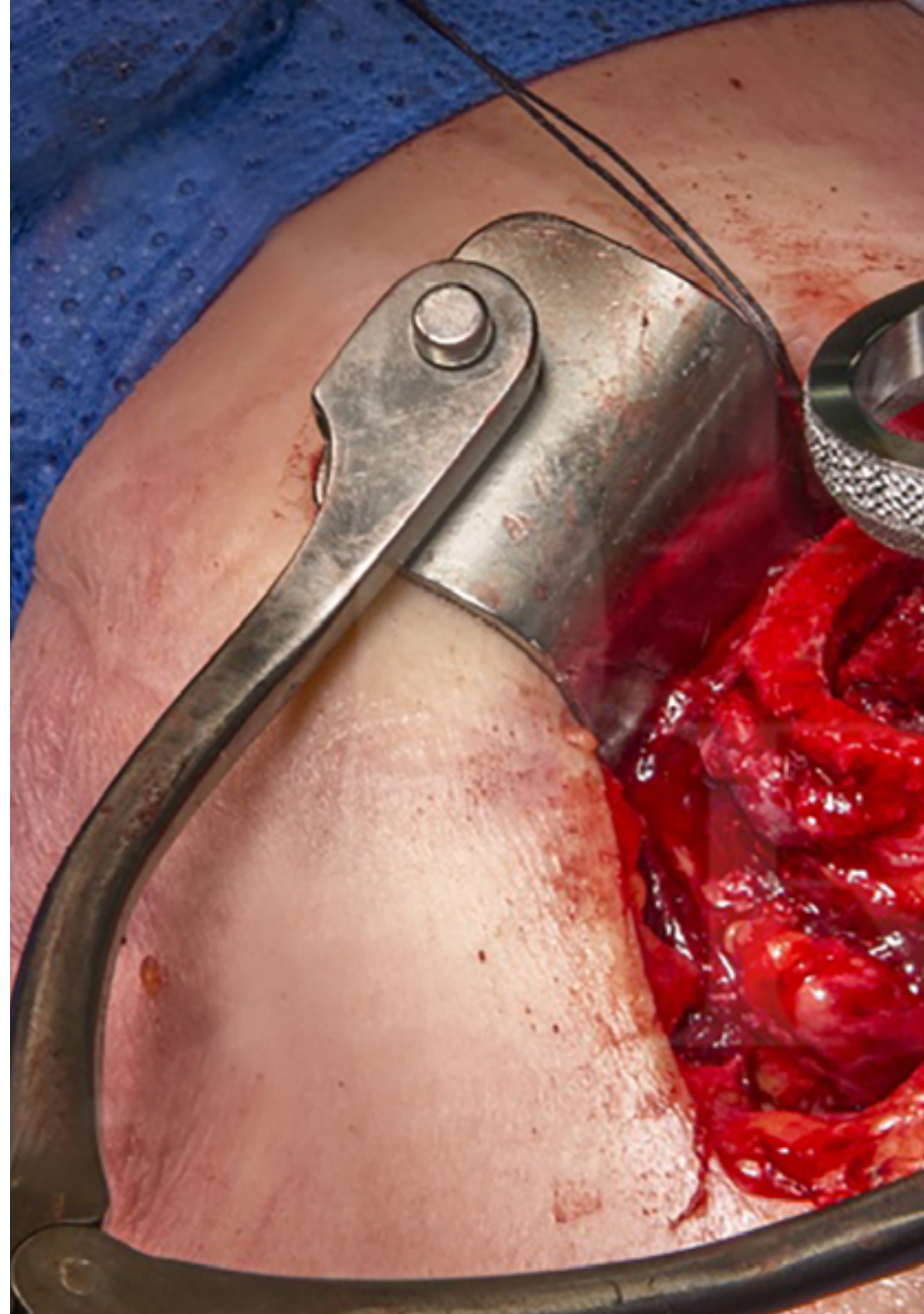
### Module 3. Congenital, pediatric and rheumatic pathologies, infections and tumors. Anesthesia

- 3.1. Phylogeny, Embryology and Ossification of the Shoulder
  - 3.1.1. Phylogeny of the Shoulder
  - 3.1.2. Shoulder Embryology
  - 3.1.3. Shoulder Ossification
- 3.2. Dysplasias affecting the shoulder
  - 3.2.1. Congenital Shoulder Pathology
  - 3.2.2. Dysplasias and syndromes involving the shoulder girdle
  - 3.2.3. Orthopedic and surgical management
- 3.3. Obstetric Brachial Palsy
  - 3.3.1. Types of obstetric brachial palsy
  - 3.3.2. Clinical Manifestations and Differential Diagnosis
  - 3.3.3. Treatment
  - 3.3.4. Residual deformities and management
- 3.4. Fractures of the proximal humerus, clavicle, scapula and acromioclavicular joint injuries in children
  - 3.4.1. Shoulder fractures in children
  - 3.4.2. Shoulder dislocations in children
  - 3.4.3. Other Acquired Shoulder Problems in Children
- 3.5. Metabolic bone pathology. Diseases due to altered osteoclastic function. Neurofibromatosis. Collagen and soft-tissue disorders
  - 3.5.1. Metabolic bone pathology
  - 3.5.2. Diseases due to alteration of osteoclastic function
  - 3.5.3. Neurofibromatosis
  - 3.5.4. Collagen and soft-tissue disorders
- 3.6. Rheumatic diseases affecting the Shoulder
  - 3.6.1. Rheumatic diseases affecting the shoulder girdle
  - 3.6.2. Diagnosis of rheumatic diseases affecting the shoulder
  - 3.6.3. Therapeutic algorithm and aspects to be taken into account in the surgical treatment of rheumatic patients

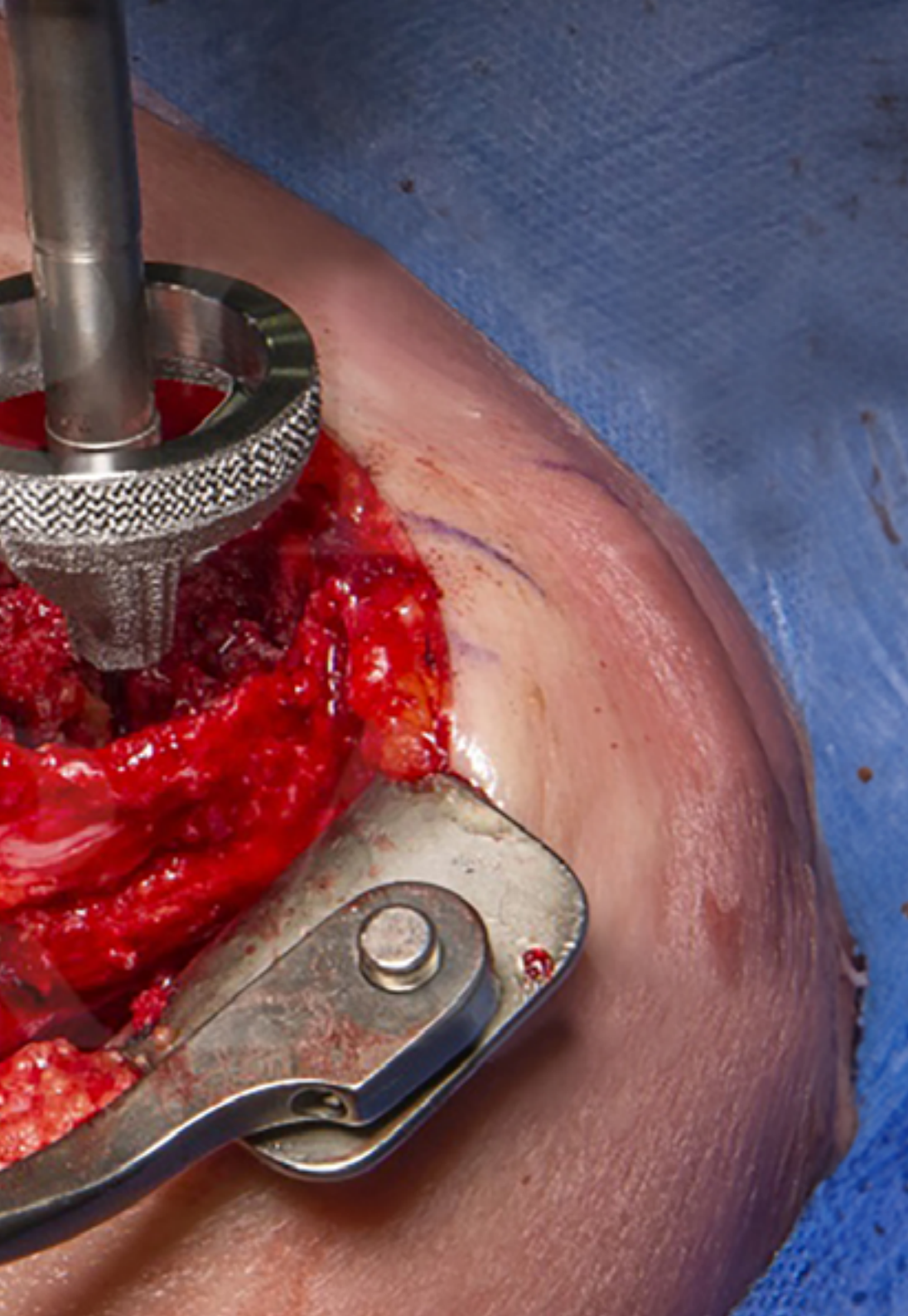
- 3.7. Shoulder Infections
  - 3.7.1. Anamnesis and Physical Examination
  - 3.7.2. Etiopathogenesis
  - 3.7.3. Diagnosis of Shoulder Infections
  - 3.7.4. Medical and surgical treatment. Therapeutic Algorithms
- 3.8. Common tumors affecting the shoulder girdle
  - 3.8.1. Most common shoulder tumors
  - 3.8.2. Algorithm for an adequate diagnosis
  - 3.8.3. Therapeutic Algorithms
- 3.9. Anesthesia in procedures affecting the Shoulder
  - 3.9.1. Regional Anesthesia
  - 3.9.2. General Anesthesia
  - 3.9.3. Brachial plexus block. Complications
  - 3.9.4. Preoperative and Intraoperative Considerations
  - 3.9.5. Postoperative Anesthesia Care
- 3.10. Treatment of pain in pathologies affecting the shoulder: Preoperative and postoperative
  - 3.10.1. Techniques
  - 3.10.2. Suprascapular nerve block and intra-articular nerve block
  - 3.10.3. Radiofrequency and stimulation
  - 3.10.4. Botulinum toxin

#### Module 4. Rotator Cuff (I). Subacromial Syndrome and Rotator Cuff Ruptures

- 4.1. Rotator cuff
  - 4.1.1. The shoulder girdle
  - 4.1.2. Rotator Cuff Muscles
  - 4.1.3. Innervation of the Rotator Cuff Muscles
- 4.2. Rotator Cuff Disease
  - 4.2.1. Rotator Cuff Disease
  - 4.2.2. Evolutionary history of rotator cuff disease
  - 4.2.3. Rotator Cuff Disease Treatment
- 4.3. Anamnesis and clinical examination. Maneuvers and diagnostic techniques
  - 4.3.1. Anamnesis in Rotator Cuff Pathology
  - 4.3.2. Exploratory maneuvers in rotator cuff pathology
  - 4.3.3. Diagnostic techniques in Rotator Cuff Pathology
  - 4.3.4. Rotator Cuff Rupture Classification







- 4.4. Subacromial syndrome without rotator cuff injury
  - 4.4.1. Subacromial syndrome without rotator cuff injury
  - 4.4.2. Diagnosis of subacromial syndrome without rotator cuff lesions
  - 4.4.3. Treatment of subacromial syndrome without rotator cuff injury
- 4.5. Partial posterosuperior cruciate cuff ruptures
  - 4.5.1. Diagnosis of partial rotator cuff tears
  - 4.5.2. Surgical indication of partial ruptures of the Posteriosuperior Cuff
  - 4.5.3. Surgical techniques in partial Posteriosuperior Posterior Cuff Injuries
- 4.6. Repairable complete posterosuperior posteriosuperior cuff ruptures
  - 4.6.1. Diagnosis of complete posterosuperior repairable breaks of the posterosuperior sleeve
  - 4.6.2. Repairable complete ruptures of the posterosuperior cuff
  - 4.6.3. Surgical techniques in repairable posterosuperior cuff ruptures
- 4.7. Subscapularis ruptures
  - 4.7.1. Diagnosis of subscapularis ruptures
  - 4.7.2. Classification of subscapularis tears
  - 4.7.3. Subscapularis repair surgical techniques
  - 4.7.4. Surgical approach to PLB pathology concomitant with anterosuperior cuff lesions
- 4.8. Massive repairable Rotator Cuff Ruptures
  - 4.8.1. Diagnosis of massive repairable rotator cuff tears
  - 4.8.2. Classification of massive repairable rotator cuff tears
  - 4.8.3. Surgical techniques in massive repairable cuff ruptures
- 4.9. Irreparable Rotator Cuff Ruptures
  - 4.9.1. Diagnosis of irreparable massive rotator cuff tears
  - 4.9.2. Classification of irreparable massive rotator cuff ruptures
  - 4.9.3. Surgical techniques for massive irreparable cuff tears
- 4.10. Therapeutic algorithm for rotator cuff tears
  - 4.10.1. Therapeutic Algorithms
  - 4.10.2. Therapeutic algorithm for rotator cuff tears
  - 4.10.3. Usefulness of the therapeutic algorithm for rotator cuff tears

## Module 5. Rotator cuff (II). Calcifying Tendinitis. Stiffness

- 5.1. Arthroscopic knotting techniques
  - 5.1.1. Key terms and points in knot mechanics
  - 5.1.2. Slip knots
  - 5.1.3. Non-slip knots
  - 5.1.4. Knot suture in Shoulder arthroscopy
- 5.2. Rehabilitation in cuff rupture: postoperative treatment: Immobilization and Physiotherapy
  - 5.2.1. Indication and immobilization times according to tear pattern in postoperative treatment of rotator cuff tears
  - 5.2.2. Indication of the different physiotherapy techniques in the postoperative period following rotator cuff rupture
  - 5.2.3. Physiotherapy techniques for rotator cuff postoperative period
  - 5.2.4. Postoperative treatment algorithm for rotator cuff tears
- 5.3. Rehabilitation in cuff rupture: Conservative treatment of rotator cuff tears. Indications and Techniques
  - 5.3.1. Indication for conservative treatment with rehabilitation in rotator cuff tears
  - 5.3.2. Physiotherapy techniques in conservative treatment of Rotator Cuff
  - 5.3.3. Therapeutic algorithm in rehabilitation treatment in conservative treatment of rotator cuff tears
- 5.4. Complications of rotator cuff repair: Infections, Rebreaks, Stiffness
  - 5.4.1. Complications of rotator cuff repair
  - 5.4.2. Diagnosis of Rotator Cuff Rupture Complications
  - 5.4.3. Therapeutic approach to the different rotator cuff complications
- 5.5. Calcifying tendinitis
  - 5.5.1. Calcifying tendinitis
  - 5.5.2. Anamnesis and Physical Examination
  - 5.5.3. Diagnostic techniques in calcifying tendinitis
  - 5.5.4. Therapeutic Algorithms
- 5.6. Stiff shoulder: diagnosis and types of stiffness. Rotator Cuff Ruptures and coexisting preoperative stiffness
  - 5.6.1. Diagnosis of glenohumeral stiffness
  - 5.6.2. Types of glenohumeral stiffness
  - 5.6.3. Rotator cuff tears and coexisting stiffness. Diagnosis and Treatment

- 5.7. Adhesive capsulitis, definition and predisposing diseases, anamnesis, examination and prognosis. Evolution
  - 5.7.1. Adhesive capsulitis
  - 5.7.2. Predisposing diseases
  - 5.7.3. Anamnesis and Physical Examination
- 5.8. Capsulitis: conservative vs. surgical treatment
  - 5.8.1. Therapeutic Algorithms
  - 5.8.2. Conservative treatment of adhesive capsulitis
  - 5.8.3. Surgical treatment of adhesive capsulitis
- 5.9. Glenohumeral internal rotation deficit (GIRD)
  - 5.9.1. Internal rotation deficit (GIRD)
  - 5.9.2. Anamnesis and Physical Examination
  - 5.9.3. Therapeutic Algorithms
- 5.10. Coexisting Rotator Cuff Breaking and Instability
  - 5.10.1. Anamnesis and Physical Examination
  - 5.10.2. Diagnosis
  - 5.10.3. Therapeutic Algorithms
  - 5.10.4. Treatment. Surgical Techniques

## Module 6. Glenohumeral Instability

- 6.1. Glenohumeral joint. Arthroscopic and external view in open surgery
  - 6.1.1. Glenohumeral Joint
  - 6.1.2. Arthroscopic view of the Glenohumeral Joint
  - 6.1.3. External view of the shoulder focused on open surgery techniques
- 6.2. Clinical Evaluation Exploratory maneuvers
  - 6.2.1. Anamnesis in glenohumeral instability
  - 6.2.2. Hyperlaxity: measurement and predisposing diseases
  - 6.2.3. Exploratory maneuvers in glenohumeral instability
  - 6.2.4. Diagnostic techniques in glenohumeral instability
- 6.3. Anterior instability: Conservative and surgical treatment. Measurement of bone deficit
  - 6.3.1. Measurement of bone deficit
  - 6.3.2. Indication of conservative and surgical treatment in anterior instability
  - 6.3.3. Therapeutic algorithm in anterior instability

- 6.4. Anterior instability: soft tissue surgical techniques. Open and arthroscopic Bankart. Arthroscopic Remplissage
  - 6.4.1. Soft tissue surgical techniques
  - 6.4.2. Arthroscopic Bankart surgical technique
  - 6.4.3. Arthroscopic Remplissage Surgical Technique
  - 6.4.4. Open Bankart surgical technique
- 6.5. Anterior instability: surgical techniques with bone stop. Open and arthroscopic Latarjet. Bony Bankart arthroscopic
  - 6.5.1. Arthroscopic knotting techniques
  - 6.5.2. Open Latarjet surgical technique
  - 6.5.3. Bony Bankart arthroscopic technique
- 6.6. Posterior instability: Conservative and surgical treatment. Surgical Techniques
  - 6.6.1. Anamnesis and Physical Examination
  - 6.6.2. Conservative Treatment
  - 6.6.3. Surgical Management
  - 6.6.4. Therapeutic Algorithms
  - 6.6.5. Surgical techniques in posterior instability
- 6.7. Multidirectional instability. Microinstability. Hyperlaxity. Sports Injuries Rehabilitation Treatment
  - 6.7.1. Multidirectional instability, microinstability, and hyperlaxity
  - 6.7.2. Multidirectional instability. Rehabilitative treatment
  - 6.7.3. Glenohumeral microinstability. Rehabilitative treatment
- 6.8. Multidirectional instability. Microinstability. Hyperlaxity. Sports Injuries Surgical Management
  - 6.8.1. Surgical Treatment Indications
  - 6.8.2. Multidirectional instability. Surgical Management
  - 6.8.3. Glenohumeral microinstability. Surgical Management
- 6.9. Complications and sequelae of glenohumeral instability
  - 6.9.1. Complications of conservative treatment
  - 6.9.2. Complications of surgical treatment
  - 6.9.3. Sequels of glenohumeral instability: Conservative and surgical treatment
- 6.10. Rescue of instability surgery: Bone cap and final arthrodesis
  - 6.10.1. Therapeutic algorithm for the rescue of instability surgery
  - 6.10.2. Bone stop as Latarjet rescue technique
  - 6.10.3. Arthrodesis as the last step

## Module 7. Scapulothoracic. Neurological Injuries

- 7.1. Biomechanics of the scapula and scapulothoracic joint
  - 7.1.1. Scapulothoracic joint
  - 7.1.2. Biomechanics of the Scapular Waist
  - 7.1.3. Biomechanics of the Scapulothoracic Joint
- 7.2. Abnormal scapulothoracic joint mobility
  - 7.2.1. Normal scapulothoracic joint mobility
  - 7.2.2. Diagnosis of abnormal scapulothoracic joint mobility
  - 7.2.3. Treatment of Abnormal scapulothoracic joint mobility
- 7.3. Pectoralis minor hyperactivation syndrome
  - 7.3.1. Pectoralis minor hyperactivation syndrome
  - 7.3.2. Diagnosis of pectoralis minor hyperactivation syndrome
  - 7.3.3. Treatment of pectoralis minor hyperactivation syndrome
- 7.4. Serratus anterior palsy
  - 7.4.1. Serratus anterior palsy
  - 7.4.2. Diagnosis of serratus anterior paralysis
  - 7.4.3. Treatment of serratus anterior palsy
- 7.5. Trapezius paralysis
  - 7.5.1. Trapezius paralysis
  - 7.5.2. Diagnosis of trapezius palsy. Diagnosis
  - 7.5.3. Treatment of trapezius palsy
- 7.6. Axillary nerve neuropathy
  - 7.6.1. Axillary nerve neuropathy
  - 7.6.2. Diagnosis of axillary nerve neuropathy
  - 7.6.3. Treatment for axillary nerve neuropathy
- 7.7. Suprascapular nerve neuropathy. Quadrilateral space syndrome
  - 7.7.1. Suprascapular nerve neuropathy
  - 7.7.2. Diagnosis of Suprascapular Nerve Neuropathy
  - 7.7.3. Treatment of Suprascapular Nerve Neuropathy
  - 7.7.4. Quadrilateral space syndrome
  - 7.7.5. Diagnosis of Quadrilateral Space Syndrome
  - 7.7.6. Treatment of Quadrilateral Space Syndrome



- 7.8. Scapulothoracic pathology associated with other processes
  - 7.8.1. Acromioclavicular pathology
  - 7.8.2. Sternoclavicular pathology
  - 7.8.3. Glenohumeral Instability
  - 7.8.4. Dysplasia
  - 7.8.5. Brachial palsy
  - 7.8.6. Others
- 7.9. Snapping scapula
  - 7.9.1. Snapping scapula
  - 7.9.2. Diagnosis of Snapping scapula
  - 7.9.3. Snapping scapula treatment
- 7.10. Rehabilitative treatment of scapulothoracic dysfunction
  - 7.10.1. Scapulothoracic Dysfunction
  - 7.10.2. Diagnosis of Scapulothoracic Dysfunction. Diagnosis
  - 7.10.3. Rehabilitative treatment of scapulothoracic dysfunction
- 8.4. Chronic acromioclavicular dislocation. Surgical treatment techniques
  - 8.4.1. Chronic acromioclavicular dislocation
  - 8.4.2. Surgical Management
  - 8.4.3. Surgical treatment techniques
- 8.5. Complications of acromioclavicular dislocation associated with conservative and surgical treatment
  - 8.5.1. Complications of acute acromioclavicular dislocation treated conservatively
  - 8.5.2. Complications of acute acromioclavicular dislocation treated surgically
  - 8.5.3. Complications of chronic acromioclavicular dislocation treated conservatively
  - 8.5.4. Complications of chronic acromioclavicular dislocation treated surgically
- 8.6. Long portion of the biceps: Anatomical Variants
  - 8.6.1. The shoulder girdle
  - 8.6.2. The long portion of the biceps
  - 8.6.3. Anatomical variants of the long portion of the biceps
- 8.7. Long portion of the biceps: SLAP lesions
  - 8.7.1. SLAP lesions
  - 8.7.2. Classification of SLAP Lesions
  - 8.7.3. Conservative Treatment
  - 8.7.4. Surgical Management

## Module 8. Acromioclavicular, sternoclavicular and long portion of biceps joints

- 8.1. Acromioclavicular joint and sternoclavicular joint. Sternoclavicular joint pathology
  - 8.1.1. The acromioclavicular joint
  - 8.1.2. The sternoclavicular joint
  - 8.1.3. Sternoclavicular joint pathology
- 8.2. Acute acromioclavicular dislocation. Conservative Treatment
  - 8.2.1. Acute acromioclavicular dislocation
  - 8.2.2. Diagnosis of Acute Acromioclavicular Dislocation
  - 8.2.3. Conservative treatment of the acute acromioclavicular joint
  - 8.2.4. Surgical treatment of the acute acromioclavicular joint
- 8.3. Surgical treatment and surgical techniques for acute acromioclavicular dislocation
  - 8.3.1. Acute acromioclavicular dislocation
  - 8.3.2. Surgical treatment for acute acromioclavicular dislocation
  - 8.3.3. Acute acromioclavicular dislocation surgical techniques
- 8.8. Long portion of the biceps: surgical treatment techniques
  - 8.8.1. The long portion of the biceps
  - 8.8.2. SLAP lesions: surgical treatment techniques
  - 8.8.3. Complications of the surgical treatment of SLAP lesions
- 8.9. Isolated lesions of the long portion of the biceps: tenosynovitis, instability and partial ruptures
  - 8.9.1. Tenosynovitis
  - 8.9.2. Instability
  - 8.9.3. Partial ruptures
- 8.10. Tenotomy versus tenodesis of the long portion of the biceps
  - 8.10.1. Indications for biceps longus tenotomy
  - 8.10.2. Indications for biceps longus tenodesis
  - 8.10.3. Tenotomy versus tenodesis

## Module 9. Scapular Waist Fractures

- 9.1. Proximal Humerus Fractures: Conservative Treatment
  - 9.1.1. Proximal Humerus Fractures
  - 9.1.2. Indications for conservative treatment
  - 9.1.3. Conservative treatment of proximal humerus fractures
- 9.2. Proximal Humerus Fracture: Surgical Treatment. Osteosynthesis
  - 9.2.1. Indications for surgical treatment by Osteosynthesis
  - 9.2.2. Locked Proximal Humerus PCL Plate: indications and surgical technique
  - 9.2.3. Endomedullary nailing: indications and surgical technique
  - 9.2.4. Other osteosynthesis techniques in Proximal Humerus fractures
- 9.3. Fractura. Proximal Humerus: Surgical treatment and arthroplasty
  - 9.3.1. Indications for surgical treatment by arthroplasty
  - 9.3.2. Hemiarthroplasty: indications after incorporation of inverted
  - 9.3.3. Total Reverse Shoulder Arthroplasty: indications and surgical technique
- 9.4. Fracture- avulsion of tuberosities. Conservative and surgical treatment. Surgical Techniques
  - 9.4.1. Diagnosis
  - 9.4.2. Indications for conservative treatment
  - 9.4.3. Indications for surgical treatment and surgical techniques
- 9.5. Proximal humerus fracture-dislocation. Conservative and surgical treatment. Surgical Techniques
  - 9.5.1. Indications for conservative treatment
  - 9.5.2. Indications for surgical treatment and surgical techniques
  - 9.5.3. Neurological lesions secondary to dislocation
- 9.6. Complications and sequelae of proximal humerus fracture
  - 9.6.1. Proximal Humerus Fracture Complications
  - 9.6.2. Therapeutic approach to the complications of proximal humerus fractures
  - 9.6.3. Proximal Humerus Fracture Sequelae
- 9.7. Hyperkalemia
  - 9.7.1. Acute hyperkalemia, causes and diagnosis
  - 9.7.2. Treatment of acute Hyperkalemia
  - 9.7.3. Renal replacement therapy in acute Hyperkalemia
- 9.8. Hyponatremia
  - 9.8.1. Estimation of extracellular volume in hyponatremia
  - 9.8.2. Hyponatremia treatment algorithms
  - 9.8.3. Usefulness of the urinary study

- 9.9. Metabolic alkalosis
  - 9.9.1. Differential Diagnosis
  - 9.9.2. Treatment of metabolic alkalosis
  - 9.9.3. The role of dialysis in metabolic alkalosis
- 9.10. Magnesium Disorders
  - 9.10.1. Hypomagnesemia
  - 9.10.2. Hypermagnesemia

## Module 10. Degenerative shoulder

- 10.1. Scientific evidence in shoulder prostheses
  - 10.1.1. Shoulder arthroplasty. Historical Perspective
  - 10.1.2. Shoulder Arthroplasty Archives
  - 10.1.3. Scientific evidence in shoulder prostheses
- 10.2. Primary osteoarthritis. Conservational Treatment
  - 10.2.1. Etiology of primary omarthrosis
  - 10.2.2. Anamnesis and Physical Examination
  - 10.2.3. Classification of primary omarthrosis
  - 10.2.4. Indications for conservative treatment
- 10.3. Primary osteoarthritis: Surgical Treatment. Techniques
  - 10.3.1. Surgical Management
  - 10.3.2. Therapeutic Algorithms Implant indication
  - 10.3.3. Surgical techniques in primary omarthrosis
- 10.4. Rotator Cuff Arthropathy. Conservative and surgical treatment. Surgical Techniques
  - 10.4.1. Rotator Cuff Arthropathy
  - 10.4.2. Conservative Treatment
  - 10.4.3. Surgical Management
  - 10.4.4. Surgical Techniques
- 10.5. Omartrosis postraumática: Conservative and surgical treatment. Surgical Techniques
  - 10.5.1. Conservative Treatment
  - 10.5.2. Surgical Management
  - 10.5.3. Surgical Techniques

- 10.6. Omarthrosis and avascular necrosis. Conservative and surgical treatment. Surgical Techniques
  - 10.6.1. Etiologies of avascular necrosis
  - 10.6.2. Conservative Treatment
  - 10.6.3. Surgical Management
  - 10.6.4. Surgical Techniques
- 10.7. Traumatic Complications in Shoulder Arthroplasty
  - 10.7.1. Periprosthetic fractures in shoulder arthroplasty
  - 10.7.2. Dislocation in shoulder arthroplasty
  - 10.7.3. Neurological injuries in shoulder arthroplasty
- 10.8. Mechanical Complications in Shoulder Arthroplasty
  - 10.8.1. Aseptic loosening in shoulder arthroplasties
  - 10.8.2. Scapular notching in shoulder arthroplasties
  - 10.8.3. Therapeutic Algorithms
- 10.9. Infectious Complications in Shoulder Arthroplasty
  - 10.9.1. Infection in Shoulder Arthroplasty
  - 10.9.2. Medical treatment of shoulder arthroplasty infection
  - 10.9.3. Surgical treatment in shoulder arthroplasty
- 10.10. Shoulder arthrodesis. Indications and surgical techniques
  - 10.10.1. Indications for shoulder arthrodesis
  - 10.10.2. Surgical Technique
  - 10.10.3. Complications of shoulder arthrodesis







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*Implement to your professional practice the most avant-garde surgical techniques to address Rotator Cuff Arthropathy with the exclusive program offered by TECH”*

06

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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*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. 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. 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 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.

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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. 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.*





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

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

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

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

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





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



#### Study Material

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

These contents are then 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.



# 07 Certificate

The Professional Master's Degree in Shoulder Surgery guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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



This private qualification will allow you to obtain a **Professional Master's Degree in Shoulder Surgery** 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.

Program: **Professional Master's Degree in Shoulder Surgery**

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  
personalized service innovation  
knowledge present  
development language  
virtual classroom



**Professional Master's  
Degree**  
Shoulder Surgery

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

# Professional Master's Degree

## Shoulder Surgery

