

# Postgraduate Certificate Temporomandibular Joint Pathology





## Postgraduate Certificate Temporomandibular Joint Pathology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/temporomandibular-joint-pathology](http://www.techtute.com/us/medicine/postgraduate-certificate/temporomandibular-joint-pathology)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 20*

05

Methodology

---

*p. 24*

06

Certificate

---

*p. 32*

# 01

# Introduction

For any patient, good temporomandibular health is essential for an optimal quality of life. It is a fundamental articulation for many bodily functions such as speech, chewing or facial expression. For this reason, the specialist must know in detail the advances made in the diagnosis and treatment of injuries or pathologies related to this region, in order to always offer a medical service in accordance with the latest scientific evidence. You will be able to do this thanks to this very complete program, oriented to update and expand your knowledge in only 6 weeks and through a convenient and accessible online format.





“

*If what you are looking for is a dynamic and modern program to get up to date on Temporomandibular Joint Pathology, TECH is your university and this Postgraduate Certificate is the opportunity to achieve it"*

The complexity that defines the temporomandibular joint and its structure based on morphological and functional characteristics often makes the work of specialists in Maxillofacial Medicine difficult, who, despite knowing in detail the specifications of each part, do not have enough time to keep up to date with the advances that have been made in diagnosis and treatment to treat pathologies affecting this region.

For this reason, TECH has decided to develop this Postgraduate Certificate in Temporomandibular Joint Pathology, with the aim of finding, in a single degree, all the information that allows them, not only to refresh their knowledge, but to update and expand it based on the latest medical evidence related to this joint. Through an comprehensive and dynamic syllabus, the graduate will be able to delve into the characteristics of the diagnosis of this type of lesions, the disorders and deformities that may occur, the most effective surgical techniques and the pathologies that, despite their infrequency, must be taken into account.

In addition, the 100% online program includes additional material in different formats, so that you can go further into the different aspects of the syllabus. All the content will be available from the beginning The Postgraduate Certificate and can be downloaded to any device with an Internet connection. In this way, TECH not only offers a personalized schedule, but also allows the graduate to adapt this academic experience at their own pace.

This **Postgraduate Certificate in Temporomandibular Joint Pathology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The examination of case studies presented by experts in Oral and Maxillofacial Surgery
- ◆ 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



*The perfect opportunity for professionals like you, who have little time, but are looking to continue updating their knowledge through programs based on the reality of the medical sector”*

“

*The Postgraduate Certificate delves into the diagnosis of Temporomandibular Joint Pathology, from the consideration of the clinical history to the aspects to be taken into account in the physical examination”*

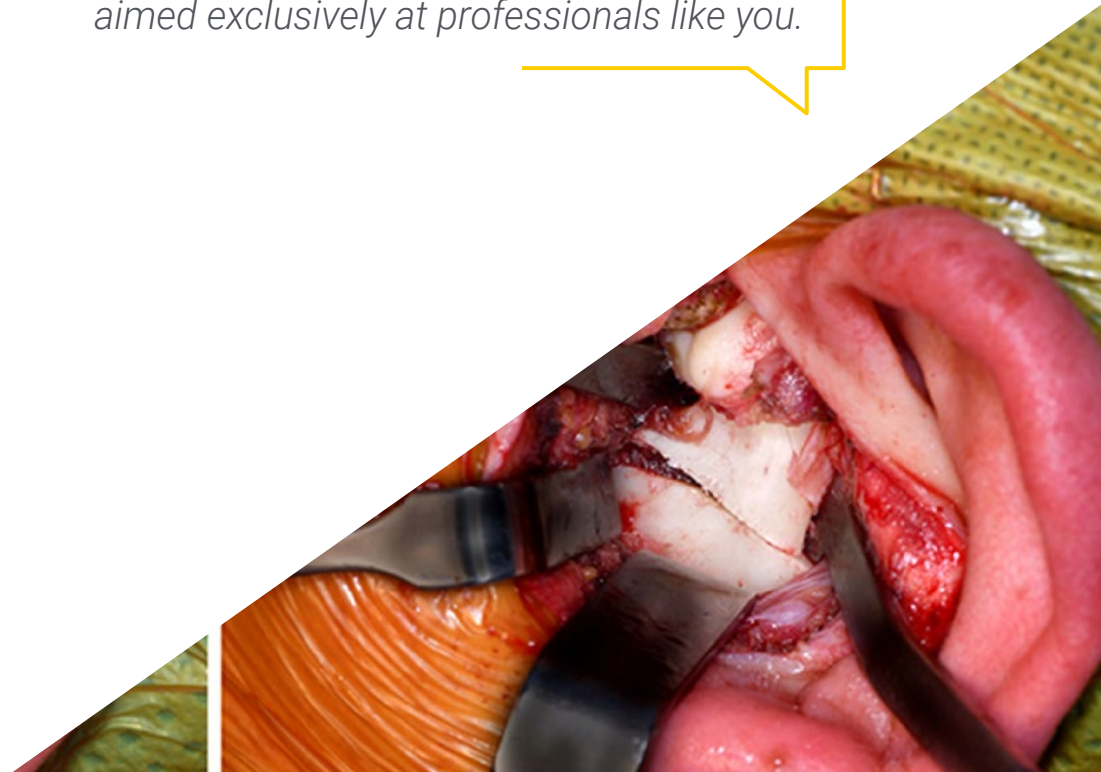
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will be able to review the embryology, anatomy and physiology of the temporomandibular joint and learn the latest news about its specifications.*

*A program designed by experts in Maxillofacial Surgery based on the immediate current situation of the sector and aimed exclusively at professionals like you.*



# 02

# Objectives

The complexity of the mandibular region, added to the countless developments in the field of medicine related to the diagnosis and approach to clinical cases with this affected joint, is what has motivated TECH to develop this program. For this reason, the objective of this program is to serve as a guide for the graduates so that they can keep up to date with the latest developments in this sector, providing them with the most innovative academic tools to facilitate the process, making this academic experience the best of their careers.







“

*You will work with real simulations of patients with Temporomandibular Joint Pathologies, so that you can put into practice what has been developed in the syllabus and perfect your approach techniques”*



## General Objectives

---

- ◆ Know the cerviofacial anatomy, a basic starting point for the entire Professional Masters Degree program
- ◆ Learn the anatomy and physiology of the relevant glands
- ◆ Build a knowledge base on a highly prevalent disorder such as sleep apneas, in which maxillofacial surgeons are among the specialists who can offer therapeutic options
- ◆ Update knowledge on facial traumatology, including its main causes and diagnostic techniques
- ◆ Know about malignant pathologies divided by anatomical regions that can affect the head and neck
- ◆ Know the different reconstructive techniques



*The goal of TECH is for you to finish this academic experience exceeding your highest expectations”*





## Specific Objectives

---

- ◆ To know the different exploration and diagnostic techniques, as well as indications for treatment
- ◆ Focus on pathologies affecting the temporomandibular joint, joint alterations due to problems in condylar development and growth
- ◆ Learn about the articular alterations related to the different dentofacial deformities
- ◆ Focus on the management of this disease and the different treatments currently available, their indications, contraindications, techniques and complications
- ◆ Explore pathologies unrelated to disc displacement (dislocations, tumors, rheumatologic diseases...) which which are requisite knowledge for any specialist who is going to work with the temporomandibular joint

# 03

## Course Management

A good management and a teaching team committed to the professional growth of the graduate is one of TECH's priorities. For this reason, this university has followed the recommendations of medical experts and has selected a group of specialists in Maxillofacial Medicine and Oral Surgery with a wide and extensive experience in the management of patients with pathologies related to the temporomandibular region. The human quality of this team, together with their current activity in reference centers, will allow the graduate to obtain a realistic, updated and critical vision of the context.



“

*You will have a team of experts in Maxillofacial Medicine at your disposal to answer any questions you may have during the course of this program”*

## International Guest Director

Dr. Brittany E. Howard is a leading **facial plastic surgeon** and expert in **Head and Neck Surgery**, with a special focus on **aesthetics, oncologic reconstruction** and advances in **Regenerative Medicine**. In this way, she has held senior positions such as **Chair of the Department of Plastic Surgery**, in the Department of Otolaryngology, Head and Neck Surgery at the **Mayo Clinic in Phoenix, Arizona**.

Her experience encompasses a wide range of **surgical procedures**, including **Rhinoplasty, Facelift, Mohs Surgery and Nasal Reconstruction**, as well as treatments for conditions such as **Head and Neck Cancer, Paralysis and Facial Deformities**. In addition, her interest in **Regenerative Medicine** has led her to investigate new techniques for **facial aging and scarring**.

It should be noted that Dr. Howard has been recognized on multiple occasions for her **professional excellence**, receiving the **Best Provider Award** from the **Mayo Clinic Experience Office** for two consecutive years. Her innovative approach and ability to treat complex conditions have established her as one of the most influential leaders in her field, and she has also been recognized as the **Best Otolaryngology Physician in Phoenix** by *Phoenix Magazine*.

In addition to her outstanding clinical work, she has dedicated herself to **research in Microvascular Surgery and Oncology**, working as an **Associate Consultant** at the **Mayo Clinic** and participating in advanced studies on the treatment and reconstruction of patients with **Head and Neck Cancer**. As such, her contribution to the field of Facial Plastic and Reconstructive Surgery has been more than significant, consolidating her as one of the leading specialists in her area. Likewise, her multidisciplinary approach and her ability to treat complex cases have made her highly respected, both by her patients and by her colleagues at an international level.



## Dr. Howard, Brittany E.

---

- Chair of the Department of Plastic Surgery, Head and Neck Surgery, Mayo Clinic, Phoenix, United States
- Associate Consultant at Mayo Clinic
- Researcher in Advanced Head and Neck Oncology and Microvascular Reconstruction at the University of North Carolina
- Specialist in Facial Plastic and Reconstructive Surgery at the University of North Carolina
- Specialist in Otolaryngology from the Mayo Clinic College of Medicine
- M.D. from the University of New Mexico
- Bachelor of Science, Colorado State University
- Member of: Mayo Clinic Comprehensive Cancer Center, Patient Safety Incident Review Group, Arizona, American Board of Otolaryngology



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

## International Guest Director

Dr. Michael L. Hinni is a leading **head and neck surgeon** at the **Mayo Clinic Comprehensive Cancer Center** in **Phoenix, Arizona**, which is considered one of the best hospitals in the **United States** for the treatment of **cancer** and designated as a **comprehensive cancer center** by the **National Cancer Institute (NCI)**.

In this regard, this outstanding professional has held the position of **Chairman** of the **Department of Head and Neck Surgery**. Here, his clinical and research expertise has focused on **Transoral Endoscopic Cancer Surgery** and **Endocrine Surgery**, fields in which he has developed an internationally recognized reputation. Indeed, with exceptional dedication, he has offered **customized treatment options** that are tailored to the specific needs and goals of his patients.

Michael L. Hinni, M.D., has also received numerous **awards and distinctions** that attest to his vast contribution to **medicine**. Among these awards are the **Steven A. Leibel Memorial Award** from the **American Society for Radiation Oncology** and the **E. Grey Dimond, M.D., Take Wing Award** from the **University of Missouri School of Medicine** in **Kansas City**. In addition, given his excellent work as an **otolaryngologist**, **Phoenix Magazine** has named him one of the **Best Doctors** on several occasions.

Likewise, his academic and professional work has been reflected in his participation in multiple professional societies, such as the **American Society of Otolaryngology, Head and Neck Surgery** and the **American Head and Neck Society**, among others. In turn, he has written or co-written more than **100 articles** in peer-reviewed journals, **16 book chapters** and edited **three textbooks**. He has also given more than **200 national and international lectures**, establishing himself as a key figure in his specialty.





## Dr. Hinni, Michael L.

---

- ♦ Chairman of the Department of Head and Neck Surgery at Mayo Clinic, Arizona, USA
  - ♦ Head and Neck Surgeon at the Mayo Clinic Comprehensive Cancer Center, Mayo Clinic, USA
  - ♦ Fellowship in Head, Neck and Skull Base Surgery at the Department of Otolaryngology, Johannes Gutenberg University, Germany
  - ♦ Fellowship in Otolaryngology at Mayo Clinic College of Medicine, Mayo Clinic School of Medicine
  - ♦ M.D. from the University of Missouri, Kansas City, Kansas City, Missouri
  - ♦ B.S. in Biology from the University of Missouri, Kansas City
- ♦ Member of:
    - ♦ American Society of Otolaryngology, Head and Neck Surgery
    - ♦ American Association of Bronchoesophagology
    - ♦ American Head and Neck Society
    - ♦ American Society of Laryngology, Rhinology & Otology
    - ♦ International Head and Neck Scientific Group

“

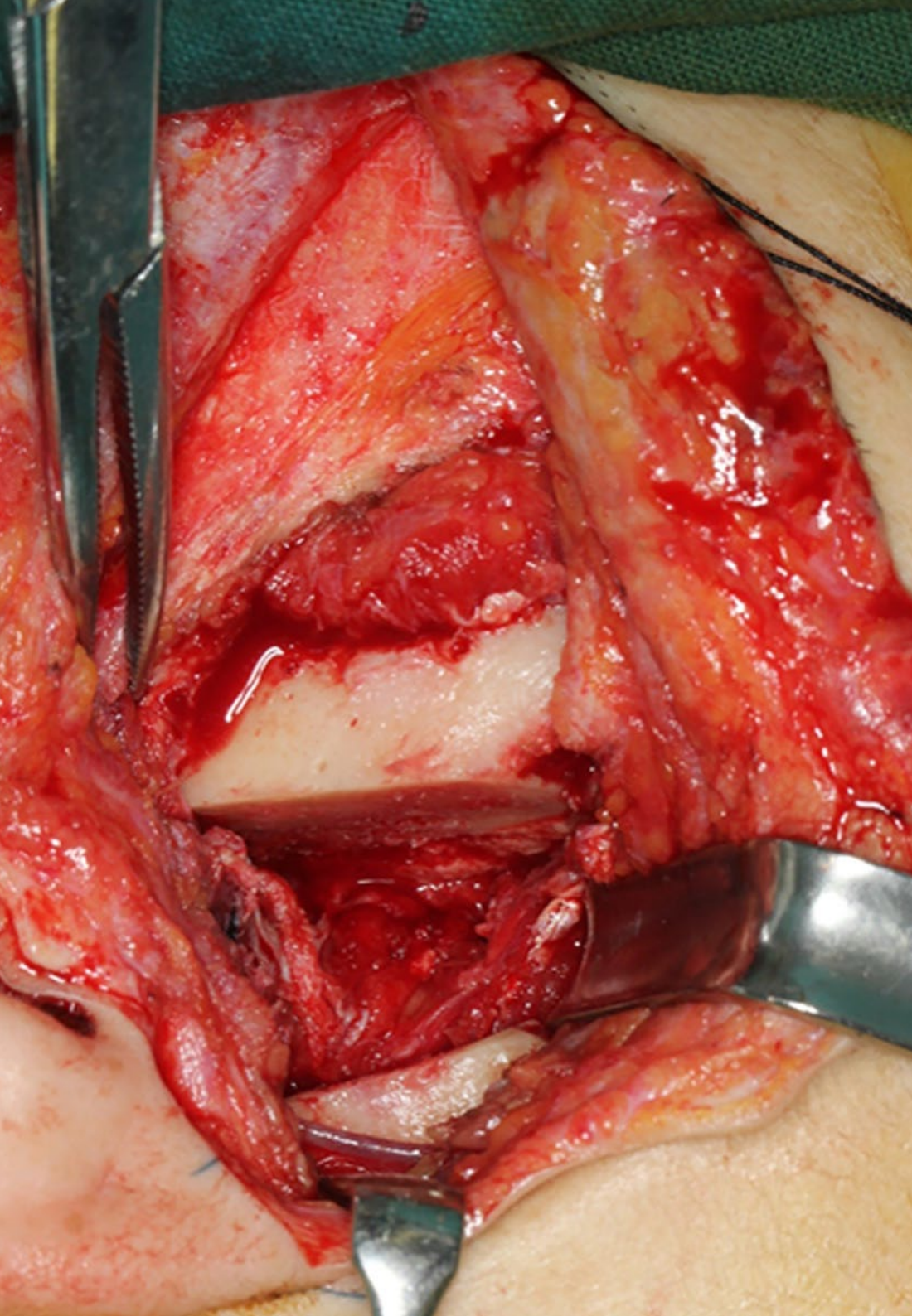
*Thanks to TECH you will be able to learn with the best professionals in the world”*

## Management



### Dr. Pingarrón Martín, Lorena

- ♦ Head of the Maxillofacial Surgery Service at Rey Juan Carlos University Hospital, General de Villalba Hospital and Infanta Elena Hospital
- ♦ Hospital General de Villalba and Hospital Infanta Elena Cirujana Maxillofacial Surgeon in Private Practice in Fundación Jiménez Díaz
- ♦ Fellow of the European Board of Oral-Maxillofacial-Surgery, 2014
- ♦ Responsible for the design and management of animal experimentation procedures: Category B+C+D
- ♦ Specialist in Oral and Maxillofacial Surgery at the Autonomous University of Madrid. La Paz University Hospital
- ♦ PhD in Medicine and Surgery, Autonomous University of Madrid, 2013 Outstanding Cum Laude
- ♦ Degree in Medicine in the University of Miguel Hernández de Elche and Complutense University of Madrid
- ♦ Member International Society for Oral and Maxillofacial Surgery
- ♦ Member of the Spanish Society of Oral and Maxillofacial Surgery
- ♦ Chair of the HURJC Investigation Committee
- ♦ Vocal Research Institute IIS-FJD, Universidad Autónoma Madrid
- ♦ Member of the HURJC Teaching Committee
- ♦ Member of the Oncology Institute FJD, Head and Neck Unit
- ♦ Member of the Multidisciplinary Sleep Unit HURJC
- ♦ Member of the HURJC Head and Neck Tumors Committee
- ♦ Reviewer Journal "Laryngoscope". ISI IndexedJournal; Impact Factor 1.617
- ♦ Revista "AfricanJournal of Biotechnology".ISI IndexedJournal; Factor Impacto 0.565



## Professors

### Dr. Page Herraiz, Inés

- ◆ FEA Oral and Maxillofacial Surgery at Rey Juan Carlos Hospital, General Hospital of Villaba and Infanta Elena Hospital
- ◆ Degree in Medicine from the University of Alcalá, Spain.
- ◆ Specialist in Oral and Maxillofacial Surgery Ramón y Cajal University Hospital.
- ◆ Postgraduate Diploma in Orthognathic Surgery. University of Alcalá
- ◆ University Master's Degree in Aesthetic and Anti-Aging Medicine Complutense University of Madrid.
- ◆ Communications and posters for National and European Congresses of Oral and Maxillofacial Surgery



*A unique, key, and decisive educational experience to boost your professional development"*

# 04

## Structure and Content

For the elaboration of the structure and content of this Postgraduate Certificate TECH has taken into the recommendations of the faculty, who, have been in charge of selecting the most innovative and up-to-date information related to H In addition, we have also selected hours of additional material in different formats (detailed videos, real clinical cases, research articles and complementary readings) with which the graduates will not only be able to contextualize the concepts developed in the syllabus, but will also have the possibility to delve deeper into those aspects they consider in a completely personalized way.

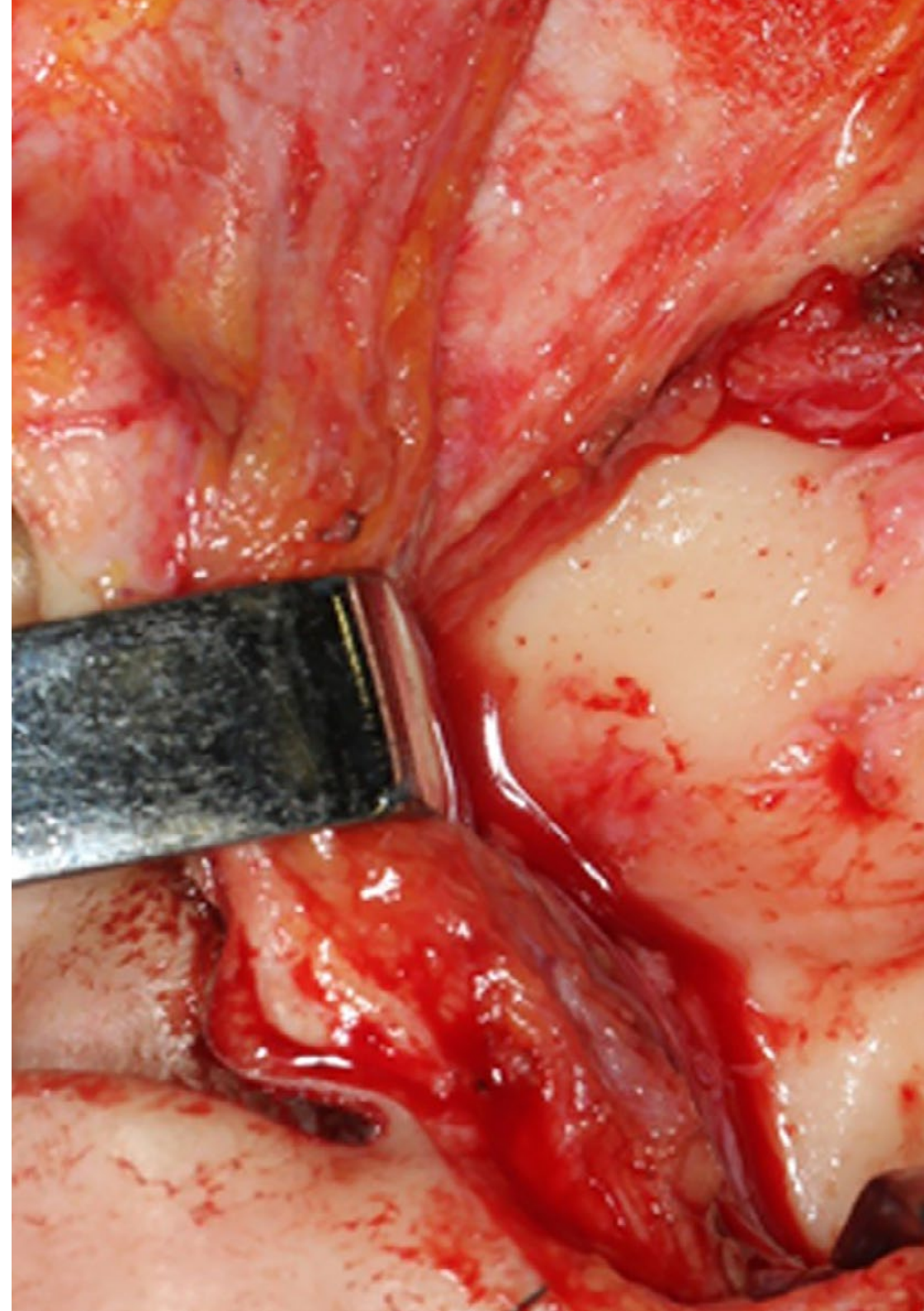


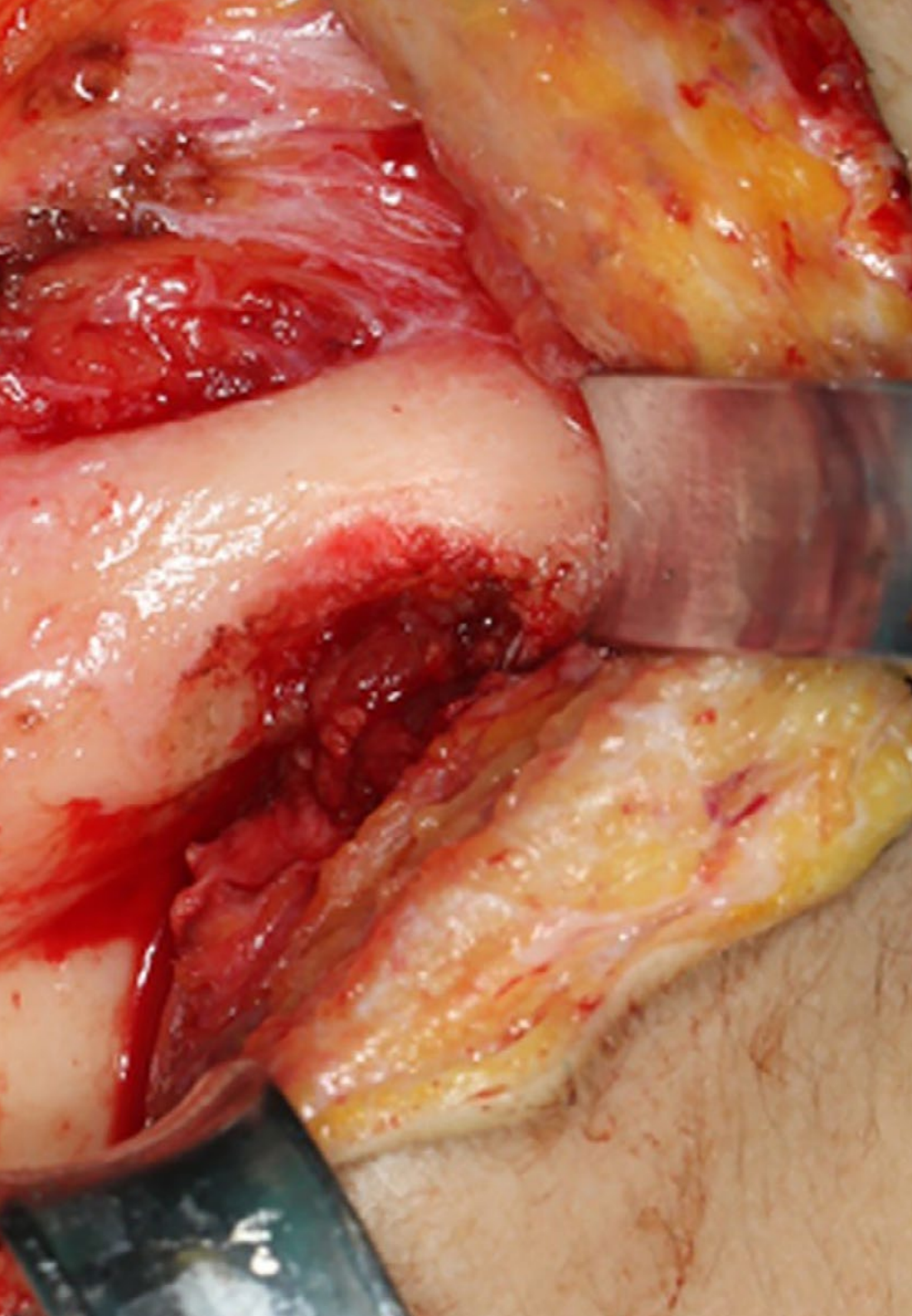
“

*You will be able to know in detail the results of the latest conservative treatments, their recommendations and contraindications”*

## Module 1. Temporomandibular Joint Pathology

- 1.1. Embryology, Anatomy and Physiology of the Temporomandibular Joint
  - 1.1.1. Temporomandibular Joint Embryology
  - 1.1.2. Temporomandibular Joint Anatomy
  - 1.1.3. Temporomandibular Joint Physiology
- 1.2. Diagnosis of Pathologies of the Temporomandibular Joint
  - 1.2.1. Medical History
  - 1.2.2. Physical Examination
  - 1.2.3. Diagnostic Imaging
- 1.3. Temporomandibular Disorders
  - 1.3.1. Temporomandibular Joint Dysfunction Syndrome
  - 1.3.2. Myofascial Pain Syndrome
- 1.4. Dentofacial and Temporomandibular Joint Deformity
  - 1.4.1. TMJ and Class II
  - 1.4.2. TMJ and Class III
  - 1.4.3. TMJ and Open Anterior Bite Treatment
- 1.5. Condylar Growth Disorders
  - 1.5.1. Mandibular Condyle Hyperplasia
  - 1.5.2. Condylar Hypoplasia
  - 1.5.3. Mandibular Condyle Agenesis
- 1.6. Temporomandibular Joint Treatment
  - 1.6.1. Conservative Treatment
  - 1.6.2. Treatment Indications
  - 1.6.3. Therapeutic Success Criteria
  - 1.6.4. Therapeutic Failure
- 1.7. Minimally Invasive Temporomandibular Joint Surgery
  - 1.7.1. Arthrocentesis
    - 1.7.1.1. Indications and Contraindications
    - 1.7.1.2. Surgical Technique
  - 1.7.2. Arthroscopy
    - 1.7.2.1. Indications and Contraindications
    - 1.7.2.2. Surgical Technique
  - 1.7.3. Complications from Minimally Invasive Surgery





- 1.8. Open Surgery of the Patellofemoral Joint
  - 1.8.1. Indications
  - 1.8.2. Contraindications
  - 1.8.3. Approaches
  - 1.8.4. Techniques
  - 1.8.5. Post-Surgery Physiotherapy
  - 1.8.6. Complications
- 1.9. Mandibular Dislocation
  - 1.9.1. Acute Dislocation
  - 1.9.2. Recurrent Dislocation
    - 1.9.2.1. Conservative Treatment
    - 1.9.2.2. Surgical Management
- 1.10. Other TMJ Pathologies
  - 1.10.1. TMJ Avascular Necrosis
  - 1.10.2. TMJ Synovial Chondromatosis
  - 1.10.3. TMJ Rheumatological Diseases
  - 1.10.4. TMJ Osteoarthritis
  - 1.10.5. TMJ Ankylosis
  - 1.10.6. TMJ Tumours



*Enroll now and start a refresher course with which you will be able to perfect your intervention techniques for patients with Temporomandibular Joint Pathologies in only 6 weeks”*

05

# Methodology

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

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





“

*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

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

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



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

“

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

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

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.



# 06 Certificate

The Postgraduate Certificate in Temporomandibular Joint Pathology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.







“

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

This program will allow you to obtain your **Postgraduate Certificate in Temporomandibular Joint Pathology** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (**official bulletin**). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

Title: **Postgraduate Certificate in Temporomandibular Joint Pathology**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 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



**Postgraduate Certificate**  
Temporomandibular  
Joint Pathology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Certificate Temporomandibular Joint Pathology

