



## Postgraduate Diploma

# Intervention Strategies in Dysphagia

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-intervention-strategies-dysphagia

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# 01 Introduction

In the implementation of new intervention strategies for patients with dysphagia, in recent years, greater relevance has been given to scientific evidence and the use of the latest technology. Furthermore, the multidisciplinary approach promoted has favored both diagnostic and therapeutic work. Given this reality, medical professionals must be constantly updating their knowledge to treat patients with this disorder and other organic pathologies. This is how this 100% online program was created, which provides specialists with a complete update in this field in only 6 months. In addition, they have the best multimedia teaching material available on the academic scene, prepared by experts in this area.



## tech 06 | Introduction

Research to better understand the relationship between systemic diseases such as Alzheimer's, Parkinson's or ALS and dysphagia has led to the identification of underlying mechanisms and the development of more effective intervention strategies. In addition, there are several studies to treat patients with oncological pathologies or those who have undergone cervical surgery.

Advances that are also evident in pharmacological advances or in muscle rehabilitation therapies, sensory stimulation or new technologies to guide the therapeutic process. In this way, emerges this Postgraduate Diploma in Intervention Strategies in Dysphagia, which brings together in 450 teaching hours the most current and rigorous information.

It is a program designed and developed by specialists with clinical experience in this field. Thanks to their professional background, the specialist who takes this educational option will delve into the progress in the understanding of the anatomy and physiology of normal swallowing and Dysphagia.

In addition, supported by numerous first class teaching material, it will delve into this disorder associated with local pathologies, respiratory diseases, organic diseases, infections, muscular diseases, among others. All this, in an exclusively online format that will allow the specialists to combine their daily activities with a quality update.

In this way, from any electronic device and at any time of the day, the student can connect and consult this avant-garde educational proposal. In this sense, without the need to go to any center in person or have classes with fixed schedules, the graduates have greater freedom to self-manage their time in this updating process.

This **Postgraduate Diploma in Intervention Strategies in Dysphagia** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Otorhinolaryngology and Speech Therapy
- 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 neurological Dysphagia"



Thanks to the Relearning method you will get an update on Dysphagia without investing long hours in memorizing concepts.



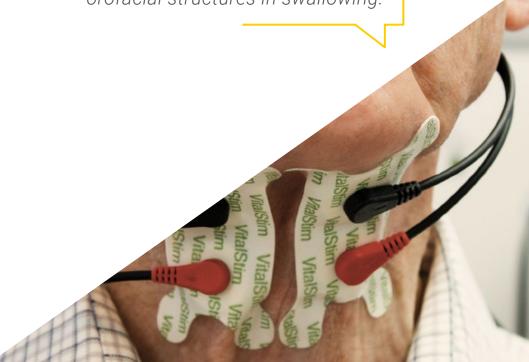
Delves into neuromuscular swallowing therapy for the improvement of involuntary swallowing function in these patients"

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

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

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

Inquire at your convenience about advances in videofluoroscopy and swallowing endoscopy techniques for the study of orofacial structures in swallowing.







## tech 10 | Objectives

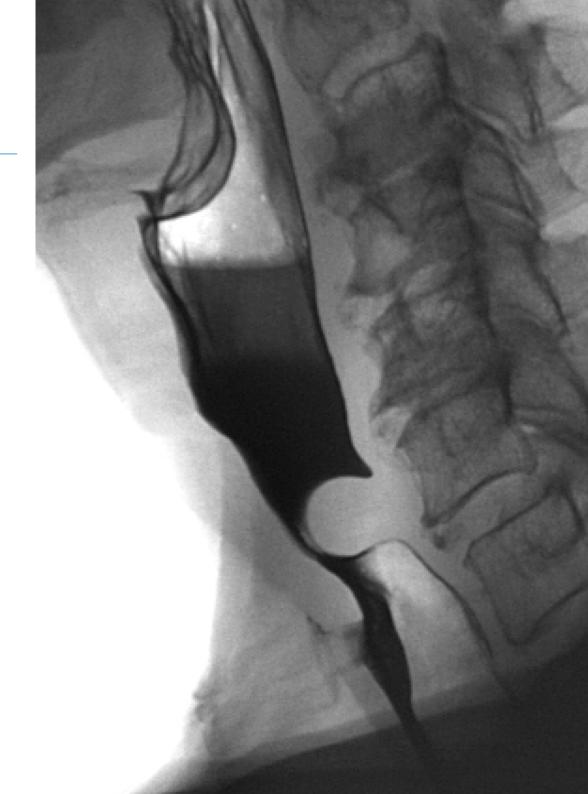


## **General Objectives**

- Update theoretical and practical knowledge about Dysphagia
- Develop clinical assessment skills
- Design and implement treatment plans according to the most current procedures
- Delve into the most up-to-date technologies and techniques
- Encourage interdisciplinary collaboration



Delve into the existing therapeutic options around Dysphagia, from the comfort of your laptop with Internet connection"





## **Specific Objectives**

#### Module 1. Anatomy and physiology of normal swallowing and Dysphagia

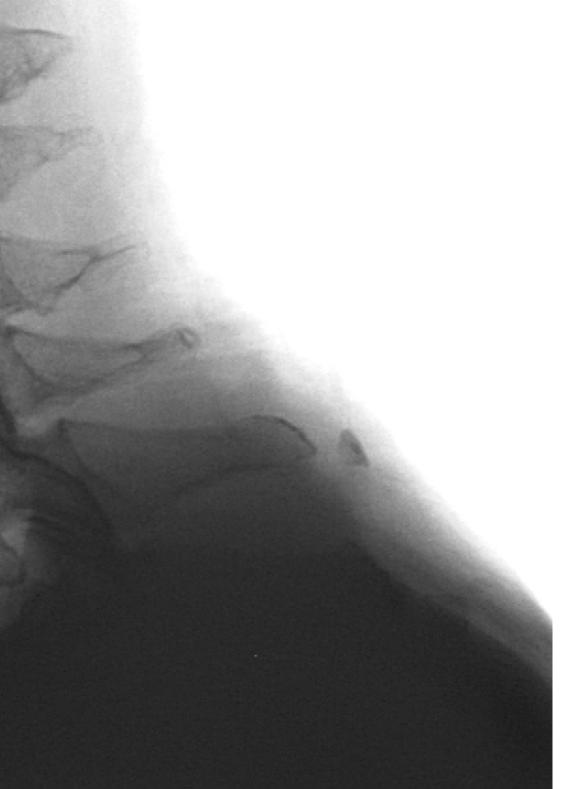
- Describe the protective mechanisms and function of anatomical structures during swallowing
- Delve into the neurophysiological basis of swallowing
- Identify the physiological changes associated with Dysphagia

#### Module 2. Dysphagia due to organic pathology

- Inquire about dysphagia due to organic pathology
- Describe the causes and anatomical or structural alterations that can lead to swallowing difficulties
- Establish state-of-the-art diagnostic tests and evaluations

#### Module 3. Treatment of Dysphagia

- Delve into the basics of the treatment of Dysphagia
- Delve into the therapeutic options available
- Identify specific therapeutic objectives
- Delve into the techniques of swallowing therapy







#### **International Guest Director**

Julie Stierwalt, M.D., is a leading consultant in the Division of Speech Pathology within the Department of Neurology at the Mayo Clinic in Rochester. With an outstanding track record in the diagnosis and treatment of Speech, Language, Cognitive and Swallowing Disorders, she has set a standard of excellence in her field. Her clinical focus has been on optimizing communication for people with both acute and progressive conditions.

She has also been recognized internationally for her research and contributions in areas such as Aphasia, Frontotemporal Dementia, Amyotrophic Lateral Sclerosis (ALS) and Functional Speech Disorders. In fact, her publications in high impact scientific journals have provided valuable insights into the treatment and diagnosis of these disorders, significantly influencing clinical practice and health policy. In addition, her interest in telepractice has been crucial in expanding access to Speech Pathology services, especially in times of pandemic.

She has also been the recipient of numerous awards and honors throughout her career, including the Leadership Award from the College of Communication and Information at Florida State University, as well as her appointment as a Fellow of the American Speech-Language-Hearing Association (ASHA). In this way, with her unwavering commitment to improving the communication and quality of life of her patients, Dr. Julie Stierwalt has become a key figure in the field of Speech Pathology, as well as an international reference in the treatment of Speech, Language and Swallowing Disorders. In this regard, her work continues to inspire healthcare professionals and benefit countless patients around the world.



## Dr. Stierwalt, Julie

- Consultant for the Division of Speech Pathology, Department of Neurology, Mayo Clinic, United States
- Speech-Language Pathologist at the Mayo Clinic
- Specialist in Neurological Disorders of Communication
- PhD in Speech-Language Pathology from the University of Iowa
- Mater's Degree in Speech Pathology, University of Northern Iowa
- B.S. in Speech Pathology, University of Northern Iowa
- Member of: Alternative and Augmentative Communication Task Force (Division of Speech Pathology), Cognitive Evaluation Committee (Division of Speech Pathology), Dysphagia Research Society, American Speech-Language-Hearing Association



## tech 14 | Course Management

#### Management



#### Mr. Maeso i Riera, Josep

- Director of the Otorhinolaryngology Section of the Otorhinolaryngology Ophthalmology Center of Egara
- Assistant Physician of the Otorhinolaryngology Service in the Head and Neck Section of the Mútua de Terrass University Hospital
- Physician in charge of the Dacryology Section (Ophthalmology Service) of the Delfos Medical Center
- Head of the Otorhinolaryngology Department at Sanitas CIMA Hospital
- Collaborating physician in the Otorhinolaryngology office of the Sanitas offices
- Specialist in Otorhinolaryngology
- Doctor in Medicine and Surgery from the Autonomous University of Barcelona
- Degree in Medicine and Surgery from the Autonomous University of Barcelona
- \* Diploma in Hospital Management from the School of Business Administration and Management
- Member of:
- Catalan Society of Oto-Rhino-Laryngology
- Spanish Society of Otorhinolaryngology and Cervico-Facial Pathology
- American Academy of Otolaryngology-Head and Neck Surgery



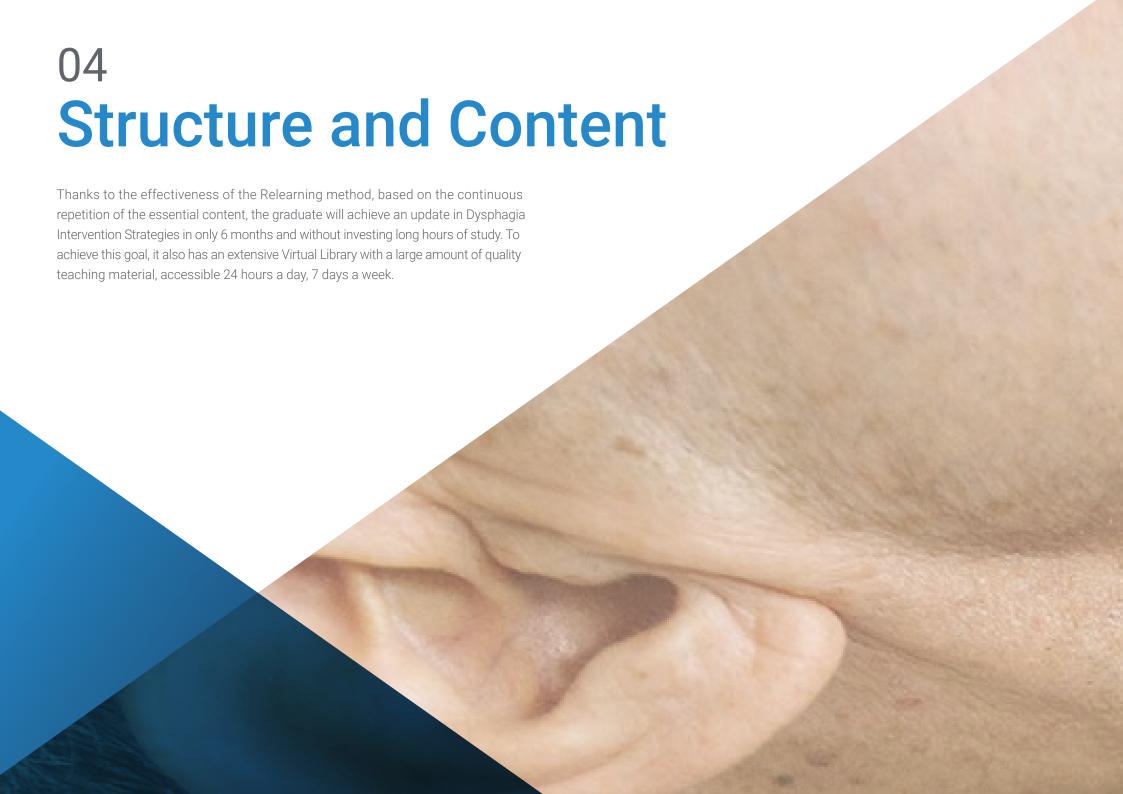
#### Ms. Marcos Galán, Victoria

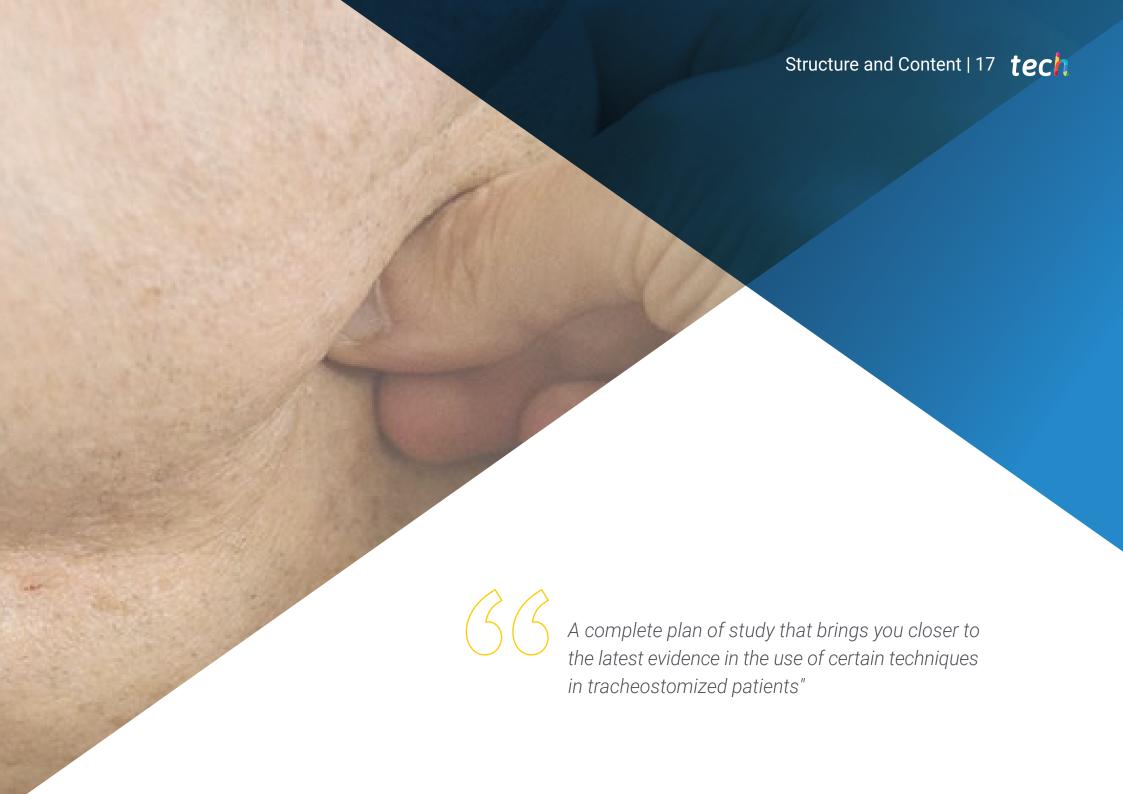
- Director of the Crecemos contigo center and Neuro-logist
- Specialist in Voice Pathology and Myofunctional Therapy
- Professor, Department of Physiotherapy in Health Sciences, Castilla La Mancha University
- Trainer in health specialization courses in Speech Therapy Intervention
- Specialist in Voice Pathology from the University of Alcalá de Henares
- Degree in Speech Therapy from the Complutense University of Madrid

#### **Professors**

#### Ms. Meneses Gómez, Ainhoa

- Speech therapist at Neuro-logo
- Speech therapist in the Support Service for people with disabilities
- Speech therapist at Policlinic Dalí
- Speech therapist in Centro Fisiogestión
- Speech therapist at the Association of parents of students with disabilities in Alcobendas
- Support Service for Persons with Disabilities (UCLM)
- Graduate in Speech Therapy from the University of Castilla-La Mancha

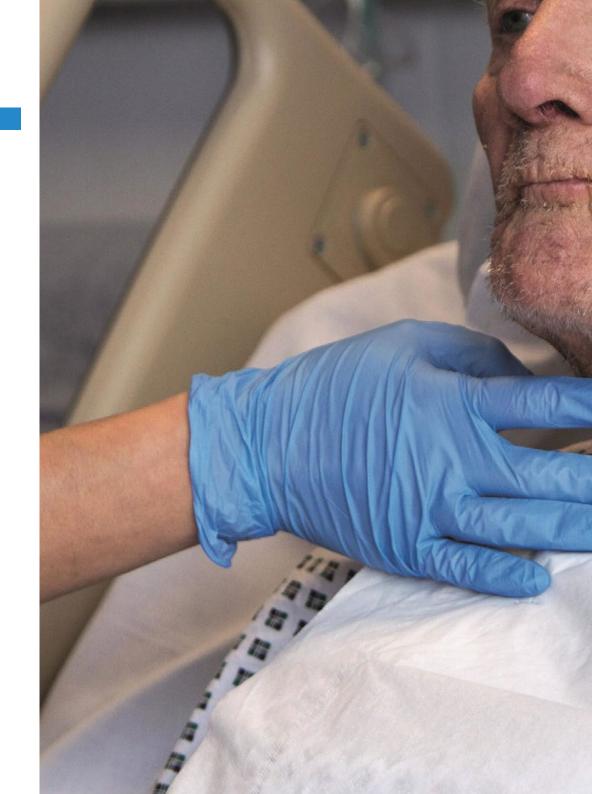




## tech 18 | Structure and Content

#### Module 1. Anatomy and physiology of normal swallowing and Dysphagia

- 1.1. Temporal Sequence of Swallowing
  - 1.1.1. Orofacial Structures Involved in Swallowing
  - 1.1.2. Muscles Involved in Swallowing
  - 1.1.3. Head and Neck
  - 1.1.4. Chest and Abdomen
- 1.2. Physiological Phases of Swallowing
  - 1.2.1. Preparatory Oral Phase
  - 1.2.2. Oral Transport Phase
  - 1.2.3. Pharyngeal Phase
  - 1.2.4. Esophageal Phase
- 1.3. Neurobiological Basis and Swallowing
  - 1.3.1. Central Nervous System
  - 1.3.2. Reflexes Involved in Swallowing
  - 1.3.3. Cranial Nerves
  - 1.3.4. Conclusions
- 1.4. Physiological Mechanisms
  - 1.4.1. Palatoglossal Seal
  - 1.4.2. Swallow Reflex
  - 1.4.3. Upper Esophageal Sphincter
  - 1.4.4. Velopharyngeal Sphincter Closure
  - 1.4.5. Laryngeal Sphincter Occlusion
  - 1.4.6. Lower Esophageal Sphincter Opening
- 1.5. Voluntary Swallowing
  - 1.5.1. Preparatory Oral Phase
  - 1.5.2. Oral phase of Transportation
  - 1.5.3. Initial Oral Phase
  - 1.5.4. Conclusions
- 1.6. Involuntary Swallowing
  - 1.6.1. Pharyngeal Phase
  - 1.6.2. Esophageal Phase
  - 1.6.3. Joint Phase
  - 1.6.4. Conclusions





## Structure and Content | 19 tech

- 1.7. Pathophysiology of Dysphagia
  - 1.7.1. Physiological Changes
  - 1.7.2. Disorders
  - 1.7.3. Muscle Alteration
  - 1.7.4. Lower Esophageal Sphincter (LES) Dysfunction
- 1.8. Anatomophysiological Alterations and Dysphagia
  - 1.8.1. Atrophy of the Musculature Involved in Swallowing
  - 1.8.2. Neoplasms in Structures Involved in the Swallowing Process
  - 1.8.3. Surgical Interventions and Dysphagia
  - 1.8.4. Obstruction in Structures Involved in Swallowing
  - 1.8.5. Inflammation of Structures Involved in Swallowing
  - 1.8.6. Radiation on Structures Involved in Swallowing
  - 1.8.7. Metabolic Alterations
  - 1.8.8. Trauma
  - 1.8.9. Tumours
- 1.9. Anatomy and Physiology of Swallowing in Neonates
  - 1.9.1. Anatomy of the Newborn
  - 1.9.2. Physiology of the Newborn
  - 1.9.3. Pathophysiology of the Newborn
  - 1.9.4. Embryology and Maturation of the Suction-Deglutition Breathing Process
- 1.10. Physiological Changes Associated with Aging
  - 1.10.1. Alterations of Orofacial Structures
  - 1.10.2. Atrophy of Masticatory Muscles
  - 1.10.3. Decreased Salivation
  - 1.10.4. Decreased Muscle Tone
  - 1.10.5. Existence of Diverticula
  - 1.10.6. Epiglottis Changes
  - 1.10.7. Increased Apnea Time
  - 1.10.8. Changes in Peristaltic Waves

## tech 20 | Structure and Content

#### Module 2. Dysphagia due to organic pathology

- 2.1. Dysphagia Associated with systemic Pathology
  - 2.1.1. Specific and Nonspecific Infectious Pathology
  - 2.1.2. Systemic Diseases and Dysphagia
  - 2.1.3. Swallowing Disorders Associated with Neuromuscular Processes
  - 2.1.4. Conclusions
- 2.2. Dysphagia Associated with Local Processes
  - 2.2.1. Cervical Trauma
  - 2.2.2. Musculoskeletal Degeneration and Dysphagia
  - 2.2.3. Esophageal Alterations and Dysphagia
  - 2.2.4. Extrinsic Dysphagia
- 2.3. Dysphagia Associated with Oncologic Pathology
  - 2.3.1. Oropharyngeal Oncologic Pathology and Dysphagia
  - 2.3.2. Dysphagia Associated with Pathology of the Thyroid Gland
  - 2.3.3. Dysphagia in Esophageal Tumor Pathology
  - 2.3.4. Conclusions
- 2.4. Dysphagia after Cervical Surgery Irradiated Patient
  - 2.4.1. Dysphagia in Total-Partial Laryngectomy
  - 2.4.2. Dysphagia in the Tracheostomized Patient
  - 2.4.3. Post-Radiotherapy Dysphagia
  - 2.4.4. Conclusions
- 2.5. Lower Esophageal Sphincter Disorder
  - 2.5.1. Sphincter Anatomy
  - 2.5.2. Sphincter Physiology
  - 2.5.3. Sphincter Alterations
  - 2.5.4. GERD
- 2.6. Upper Airway Injuries and Dysphagia
  - 2.6.1. Upper Airway Anatomy
  - 2.6.2. Clinical Assessment
  - 2.6.3. Neuromuscular Disorders
  - 2.6.4. Head and Neck Cancer

- 2.7. Dysphagia and Tracheostomates
  - 2.7.1. Impact of Tracheostomy on Swallowing
  - 2.7.2. Respiratory Complications
  - 2.7.3. Diet Management
  - 2.7.4. Techniques and Strategies
- 2.8. Dysphagia in Respiratory Diseases
  - 2.8.1. Chronic Respiratory Diseases
  - 2.8.2. COPD
  - 2.8.3. Pulmonary Fibralgia
  - 2.8.4. Muscular dystrophy
- 2.9. Dysphagia in Infections or Other Organic Diseases
  - 2.9.1. Upper Respiratory Tract
  - 2.9.2. Lower Respiratory Tract
  - 2.9.3. Gastrointestinal Tract
  - 2.9.4. Esophageal Diseases
- 2.10. Dysphagia Related to Muscular Diseases
  - 2.10.1. Duchenne Muscular Dystrophy
  - 2.10.2. Duchenne Muscular Dystrophy
  - 2.10.3. Waist Muscular Dystrophy
  - 2.10.4. Myotonic Muscular Dystrophy Type 1

#### Module 3. Treatment of Dysphagia

- 3.1. Intervention in Dysphagia: Speech Therapists and Other Professionals
  - 3.1.1. Multidisciplinary Treatment in Dysphagia
  - 3.1.2. Importance of Multidisciplinary Treatment
  - Speech Therapy Treatment Guidelines for other Professionals Involved in the Treatment of Dysphagia
  - 3.1.4. Importance of Evidence-Based Logopedic Therapy
- 3.2. Intervention in Organic Dysphagia
  - 3.2.1. Patients with Head and Neck Cancer
  - 3.2.2. Patients with Spinal Injury
  - 3.2.3. Laryngectomized Patients
  - 3.2.4. Patients with Respiratory Disorders

- 3.2.5. Patients with Thyroid and Recurrent Nerve Involvement
- 3.2.6. Clinical Cases
- 3.3. Intervention in Neonatal Dysphagia
  - 3.3.1. Procedure
  - 3.3.2. Materials. How Do I Use It?
  - 3.3.3. Guidelines for Parents
  - 3.3.4. Clinical Cases
- 3.4. Intervention in Pediatric Dysphagia
  - 3.4.1. Procedure
  - 3.4.2. Materials. How Do I Use It?
  - 3.4.3. Guidelines for Parents
  - 3.4.4. Clinical Cases
- 3.5. Intervention in Neurological Dysphagia
  - 3.5.1. Stroke and TBI Patients
  - 3.5.2. Patients with Parkinson's Disease
  - 3.5.3. Patients with Alzheimer's or Motor Neuron Disease
  - 3.5.4. Multiple Sclerosis Patients
  - 3.5.5. Cerebral Palsy Patients
  - 3.5.6. Patients with Myasthenia Gravis or Guillen-Barré Syndrome
  - 3.5.7. Clinical Cases
- 3.6. Dysphagia Intervention by COVID
  - 3.6.1. Procedure
  - 3.6.2. Materials
  - 3.6.3. Guidelines for Caregivers
  - 3.6.4. Clinical Cases
- 3.7. Intervention in Adult Patients
  - 3.7.1. Procedure
  - 3.7.2. Materials
  - 3.7.3. Guidelines for Caregivers
  - 374 Clinical Cases

- 3.8. Wrist Arthroscopy I. Portals and Anatomy
  - 3.8.1. Arthroscopic Portals
  - 3.8.2. Radiocarpal and Midcarpal Anatomy
  - 3.8.3. Other Explorations
  - 3.8.4. Step by Step Arthroscopic Exploration
  - 3.8.5. Wrist Arthroscopy Complications
- 3.9. Wrist arthroscopy II Surgical Techniques
  - 3.9.1. Identification and Classification of Ligament Injuries
  - 3.9.2. Arthroscopic Treatment of Scapholunate and Lunopyramidal Lesions
  - 3.9.3. Arthroscopic Treatment of Wrist Ganglions
  - 3.9.4. Arthroscopic Treatment of Triangular Fibrocartilage Lesions
  - 3.9.5. Treatment of Ulnar Cartilage Impingement
- 3.10. Wrist Arthroscopy III Surgical Techniques
  - 3.10.1. Arthroscopic Treatment of Distal Radius Fractures
  - 3.10.2. Arthroscopic Treatment of Scaphoid Carpal Fractures
  - 3.10.3. Arthroscopic Technique Partial Wrist Arthrodesis and Proximal Carpectomy
  - 3.10.4. Arthroscopy of Small Joints and Trapeziometacarpal Joints



With TECH you will be up-to-date with the new pharmacological and stimulation treatments used in patients with Dysphagia"





## tech 26 | Methodology

#### At TECH we use the Case Method

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

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



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



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

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

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





#### Relearning Methodology

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

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

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



### Methodology | 29 tech

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

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

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

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

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

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



#### **Study Material**

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

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



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

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



#### **Interactive Summaries**

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

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





#### **Additional Reading**

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

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

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



#### **Testing & Retesting**

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



#### Classes

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

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



#### **Quick Action Guides**

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









## tech 34 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Intervention Strategies in Dysphagia** 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 Diploma in Intervention Strategies in Dysphagia

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Diploma in Intervention Strategies in Dysphagia

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.

health confidence people
leducation information tutors
guarantee accreditation teaching
institutions technology learning



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