Hybrid Professional Master's Degree

Advances in Pediatric Gastroenterology and Hepatology

tech technological university

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Advances in Pediatric Gastroenterology and Hepatology

Modality: **Hybrid (Online + Clinical Internship)**
Duration: **12 months**
Certificate: **TECH Technological University**
Teaching Hours: **1,620 h.**
Website: **www.techtitute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-advances-pediatric-gastroenterology-hepatology**

Index

01

Introduction

Gastroenterological and hepatic intervention in pediatric patients requires the professional to master a wide body of knowledge as it is a health field in constant updating. The techniques and tools available to this medical area have evolved considerably in the last decades and, therefore, it is imperative to keep specialists up to date. This Hybrid Professional Master's Degree has been created to provide physicians with a complete experience that allows them to acquire theoretical knowledge, first, and then its practical application, immersing them in the hospital reality of a first level center, with the most advanced technology in this field at the moment and the most qualified professionals in the sector.

A complete Hybrid Professional Master's Degree that will take you from the most updated theory to the most complete real practice, enabling you for the most updated and efficient intervention in the area of Gastroenterology and Hepatology"

Like other areas of health, Pediatric Gastroenterology and Hepatology has a large number of advances that have been obtained from complex and recent scientific research. These advances have led to the evolution of protocols and management guidelines for different pathologies. At the same time, new technologies have been implemented to offer more comprehensive diagnostic and therapeutic methods to ensure adequate patient recovery. In view of this reality, professionals require continuous updating on all these issues. For this reason, TECH has designed a first-class Hybrid Professional Master's Degree that will bring all specialists interested in the most latent changes in this sector up to date.

For this academic process, the program will be divided into two distinct stages. In the first one, the pediatrician will analyze, in a theoretical way, the main advances in food allergy and eosinophilic disorders. In turn, they will examine the latest therapeutic trends for managing inflammatory bowel disease. He will also delve into the challenges regarding esophageal and gastric pathologies. The analysis of these contents will be developed through an innovative learning platform, 100% online, interactive and without pre-established schedules.

In a second stage, the physician will have access to a practical and face-to-face stay in a hospital institution of international prestige. This training will last for 3 weeks and the professional will have the opportunity to apply his updated knowledge directly on real patients. The healthcare institutions will also facilitate the handling of advanced technologies by the students, in conjunction with renowned experts. In turn, they will be supported by an assistant tutor who will monitor their academic progress and help them integrate the new dynamics into their daily professional activity.

This **Hybrid Professional Master's Degree in Advances in Pediatric Gastroenterology and Hepatology** contains the most complete and up-to-date scientific program on the market. Its most outstanding features are:

- More than 100 clinical cases presented by experts in the different specialties. Its graphic, schematic and practical contents, which are designed to provide scientific and healthcare expertise in medical disciplines that are essential for professional practice
- Comprehensive systematized action plans for major pathologies
- Presentation of practical workshops on procedures diagnosis, and treatment techniques
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Practical clinical guides on approaching different pathologies
- Special emphasis on test-based medicine and research methodologies
- All this will be complemented by 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
- In addition, you will be able to carry out a clinical internship in one of the best hospitals in the world

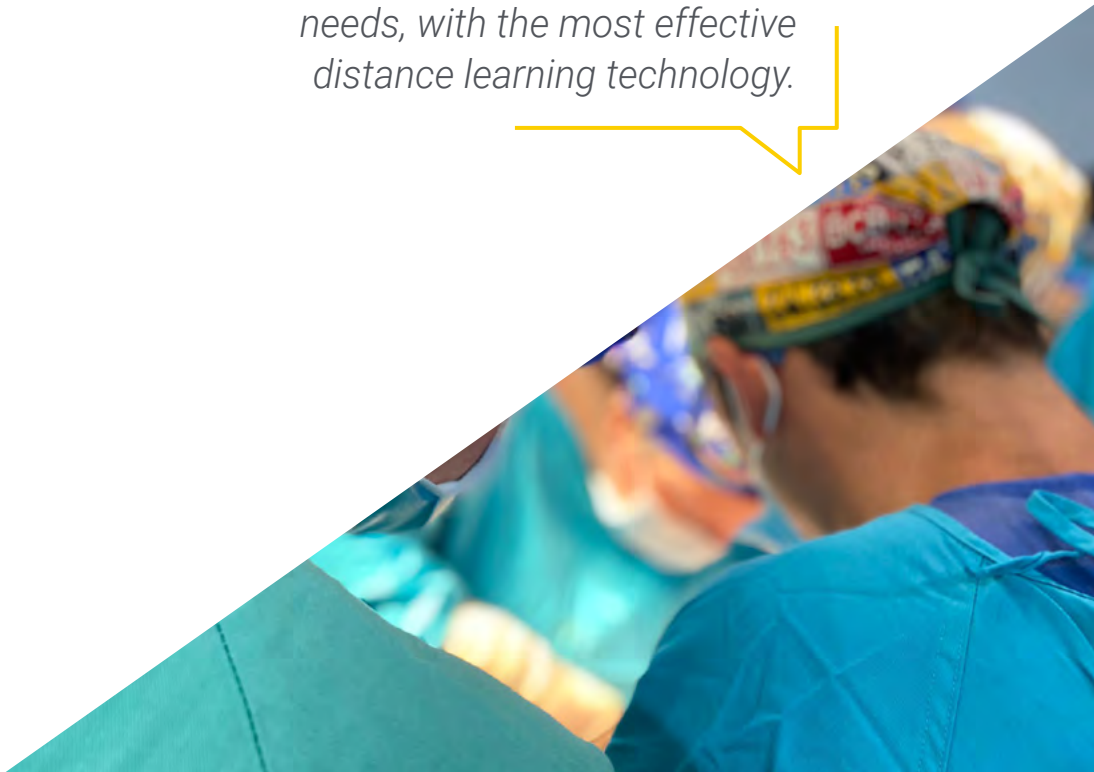
Enjoy an intensive 3-week stay in one of the best healthcare centers in the world and acquire all the knowledge to grow personally and professionally"

This Hybrid Professional Master's Degree allows you to practice, first, in simulated environments that provide immersive learning, and then in the real hospital environment testing everything you have studied.

Update your knowledge through this theoretical and practical program, in a way adapted to your needs, with the most effective distance learning technology.

In this Hybrid Professional Master's Degree, of a professionalizing nature and blended learning modality, the program is aimed at updating medical professionals in the field of Gastroenterology and Hepatology. The contents are based on the latest scientific evidence and oriented in a didactic way to integrate theoretical knowledge into practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision making in patient management.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare 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. This will be done with the help of an innovative interactive video system developed by renowned experts with extensive teaching experience.



02

Why Study this Hybrid Professional Master's Degree?

Pediatric Gastroenterology and Hepatology faces numerous challenges and opportunities today. Some of its most innovative techniques have become indispensable in hospital centers. In addition, the technological resources for the intervention of pediatric and adolescent patients with gastroenterological and hepatic disorders have been updated and readjusted to different anatomical characteristics. At the same time, this Hybrid Professional Master's Degree is distinguished by its innovative contents that combine the theoretical and practical updating of the most interested professionals in this academic field.

With TECH, you will have access to prestigious hospitals and will be able to intervene in the management of real patients with liver disorders of varying complexity"

1. Updating from the latest technology available

This Hybrid Professional Master's Degree delves into the most innovative applications and procedures that can be performed with the equipment currently available in the area of Pediatric Gastroenterology and Hepatology. Through it, the medical professional will master the keys to complex techniques such as chromoendoscopy, impedanciometry, among others.

2. Gaining In-Depth Knowledge from the Experience of Top Specialists

Throughout this program, the physician will be accompanied at all times by leading experts. During the theoretical phase, you will work with a teaching staff of excellence and then, in the practical phase, you will work directly with specialists who develop the contents of this program in first level hospital centers. In addition, you will have an assistant tutor who will guide your processes in a personalized way.

3. Entering First-Class Clinical Environments

TECH carefully selects all the centers that will be part of the practical stay integrated to this Hybrid Professional Master's Degree. These instances will guarantee the professional access to a prestigious clinical environment, from where they will be able to directly analyze the work dynamics of a demanding, rigorous and exhaustive medical area.

4. Combining the Best Theory with State-of-the-Art Practice

Few programs manage to combine theoretical and practical learning of its contents as well as TECH. Professionals who opt for this Hybrid Professional Master's Degree will have the opportunity to acquire skills in both directions, since the program will apply all the contents, studied online, in a face-to-face and intensive 3-week stay.

5. Expanding the Boundaries of Knowledge

For the clinical practice of this Hybrid Professional Master's Degree, TECH offers centers of international scope. In this way, the specialist will be able to expand his frontiers and keep up to date with the best professionals, from first level hospitals located in different latitudes.

You will have full practical immersion at the center of your choice"

03

Objectives

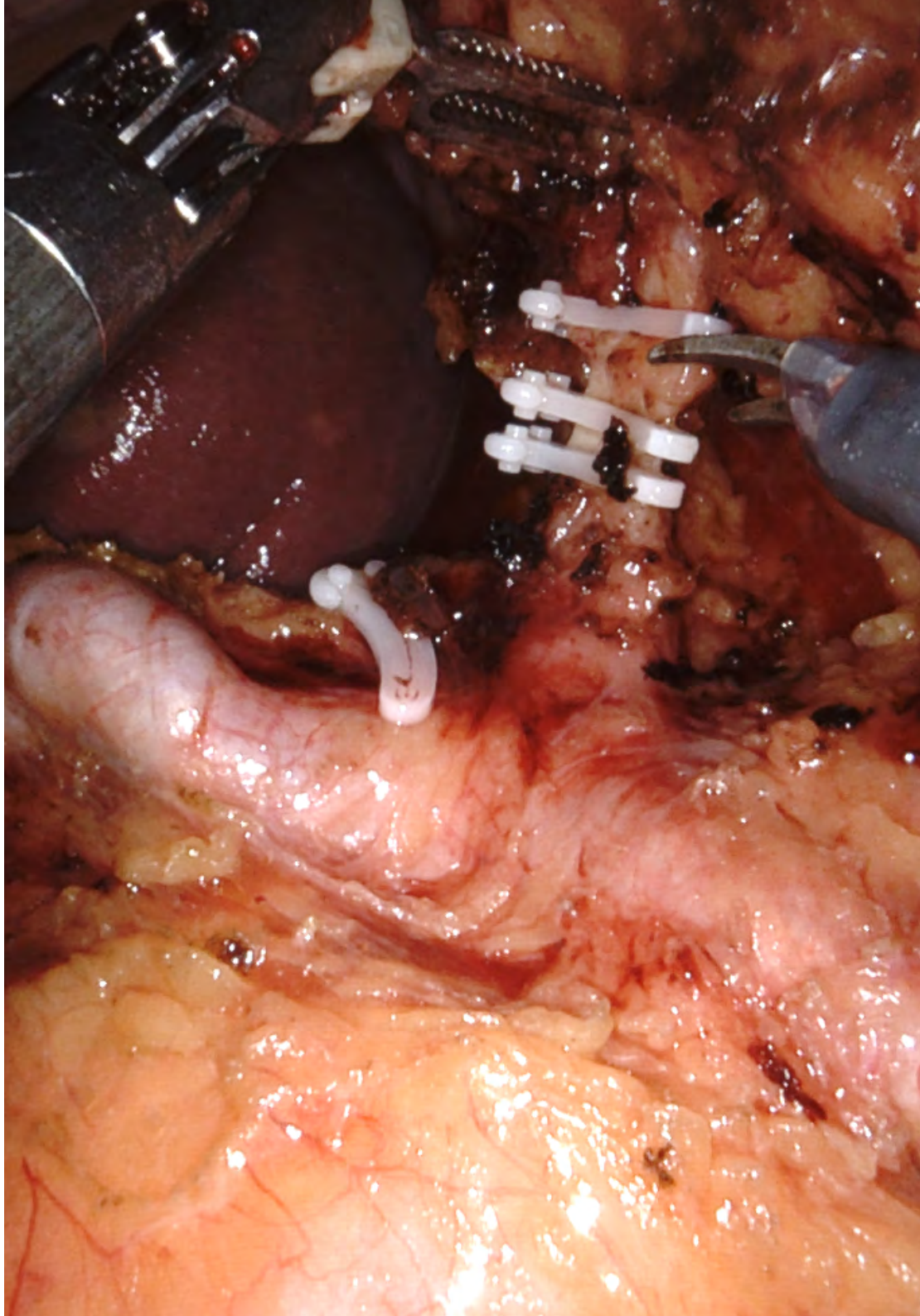
TECH designs each of its programs with the objective of guiding graduates in their exhaustive updating. To this end, it offers the most exhaustive and innovative information, as well as the best academic tools. In this way, the specialist attends an academic experience that provides everything they need to update their knowledge in a guaranteed way and in only 1,620 didactic hours.

The perfect program to update IBD diagnostic criteria on a clinical and technical, theoretical and practical level"

General Objective

- The main objective of this very complete and comprehensive Hybrid Professional Master's Degree in Advances in Pediatric Gastroenterology and Hepatology, developed exclusively by TECH, is to allow the graduate to update their knowledge with special preparation and interest in the digestive field of children and adolescents. All this will favor the acquisition of the best technical skills and abilities, by means of a powerful audiovisual system and with the possibility of development through online simulation and/or training workshops

The perfect program to update the diagnostic criteria IBD diagnostic criteria on a clinical and technical, theoretical and practical level"



Specific Objectives

Module 1. Advances in Food Allergy and Eosinophilic Disorders

- Update the physician's knowled.ge of the pathophysiology of food allergy
- Conduct a review of the current global epidemiology of food allergy and its possible clinical presentations
- Analyze the current diagnostic possibilities of food allergies and update knowledge of international protocols
- Update knowledge of current and developing therapeutic possibilities in the field of food allergy
- Know current food allergy prevention measures and the current research base
- Learn about primary eosinophilic disorders in their pathophysiological, epidemiological, diagnostic, therapeutic and preventive aspects

Module 2. Update on Functional Digestive Disorders

- Update the physician's knowledge of functional digestive disorders and the corpus of neurogastroenterology
- Learn about the pathophysiology of pediatric functional digestive disorders
- Understand the behavior and influence of the intestinal ecosystem on disease and health
- Learn about the influence of sociocultural aspects on functional digestive disorders
- Delve into functional digestive disorders from a biopsychosocial perspective
- Individual knowledge of functional digestive disorders in the neonatal stage and in breastfeeding infants
- Individual knowledge of functional digestive disorders in the school age and in adolescents
- Learn about the advances in pharmacology, pharmacokinetics and pharmacogenomics applied to functional digestive disorders in pediatrics

Module 3. New Perspectives in Celiac Disease

- Learn about the new laboratory tests available for the diagnosis and follow-up of celiac disease
- Update knowledge on the treatment and prevention of celiac disease
- To analyze the current avenues of research into future therapeutic strategies in the field of celiac disease
- Gain up-to-date knowledge about the pathophysiology of inflammatory bowel disease (IBD)
- Update the diagnostic criteria for IBD at the clinical and technical level
- Learn about the existing diagnostic possibilities, their indications and interpretation, in relation to IBD
- Advanced management of Celiac Disease biomarkers
- Learn the activity rates of pediatric IBD and its evolution
- Learn about the pharmacological treatments available for IBD and current avenues of research

Module 4. Inflammatory Bowel Disease. Present and Future

- Understand the differential aspects in epidemiology, etiopathogenesis, diagnosis and treatment between pediatric versus adult inflammatory bowel disease
- Acquire skills in stratifying treatment in the different phases of the disease in pediatric patients, as well as to know the indications, contraindications and complications of the use of these drugs in pediatric patients
- Take into account aspects of quality of life, growth impairment and behavior of the disease in adulthood when it appears in childhood

Module 5. Challenges in Esophageal and Gastric Pathology

- Identify congenital intestinal anomalies and their management
- To analyze in detail the alterations of digestion and absorption in pediatric age
- Detail intestinal motility disorders and their management
- Explain Hirschsprung's disease and intestinal dysplasias
- Learn how to manage different viral and bacterial intestinal infections in an up-to-date way
- Learn how to manage the different intestinal infections caused by parasites in an updated way
- Learn how to manage the different intestinal fungal infections in an updated way
- Know in detail about the current knowledge on neonatal necrotizing enterocolitis, approach and sequelae
- Explain short bowel syndrome and its management
- Update the available knowledge about intestinal polyps and their management

Module 6. Update in Intestinal Pathology

- Expand knowledge about gastroesophageal congenital anomalies
- Define current protocols regarding gastroesophageal reflux and esophagitis in pediatric patients
- In-depth analysis of gastroesophageal motor disorders
- Describe the guidelines for action in case of trauma, infections and esophagitis due to chemicals
- Update knowledge about peptic ulcer disease and gastritis
- Complete the body of knowledge about rare gastroesophageal diseases
- Describe the management of gastroesophageal pathology in pediatric emergencies

Module 7. Advances in Hepatobiliopancreatic Pathology

- Expanding the body of knowledge with the analysis of other hepatopathies and their implications
- Understand the complications of advanced liver disease and their management
- Define the current status of liver transplantation and future avenues for development
- Explain liver support techniques and their indications

Module 8. Progress in Digestive and Hepatic Oncology

- Recognize the importance of the digestive system in pediatric oncohematology and the pathophysiologic basis of the processes
- Delve into the management of gastrointestinal complications of chemotherapy in children
- Learn the diagnosis and management of abdominal oncologic emergencies
- Learn about gastrointestinal opportunistic infections and their management
- Explain pediatric gastrointestinal neoplasms and their management
- Learn in detail about liver tumors in pediatrics and their management

Module 9. Techniques in Pediatric Gastroenterology

- Detail the possible biochemical determinations in blood, urine, feces and sweat related to pediatric gastroenterology and their interpretation
- Detail upper and lower gastrointestinal endoscopy in pediatric patients, its technique, applications and findings
- Delve into the pathological anatomy of biopsy specimens, their collection and interpretation
- Describe the different exhaled air tests available and their interpretation
- Learn the applications of capsuloendoscopy in pediatrics and how to interpret its findings
- Explain the applications of endoscopic retrograde cholangiopancreatography
- Expand expertise in malabsorption and pancreatic insufficiency studies
- Gain in-depth knowledge of the indication and interpretation of the different radiological techniques at the abdominal level
- Know the indications and interpretation of gastrointestinal and hepatobiliary ultrasound
- Update knowledge about endorectal ultrasound in pediatrics
- Update the indications and interpretation of abdominal CT and MRI
- Learn about radioisotope studies, their indications and possibilities
- Learn how to interpret anorectal and esophageal manometry extensively
- Learn how to interpret esophageal pH-metry and impedancemetry extensively
- Define possible microbiological studies, indications and interpretation in digestive pathology
- Explain new molecular biology techniques and their applications
- Describe the indications for exploratory laparoscopy

Module 10. Gastrohepatology: New Paths Opening the Door to Innovation

- Deepen the knowledge of chronobiology applied to the digestive system, its practical applications and future challenges
- Expand knowledge of epigenetic applications in pediatric gastroenterology
- Describe the methods of study of the intestinal microbiota and their applications, as well as to delve into probiotic therapy
- Delve into the molecular, genetic and microbiological aspects of obesity, its current problems and the implication of gastroenterology in its approach
- Explain current technological advances in diagnostic instrumentation with a special focus on new endoscopic technologies
- Deepen in the applications of telemedicine for education and control of patients with digestive pathology, with special emphasis on wearable devices
- Explain the different social networks and their potential usefulness in the field of pediatric gastroenterology

Acquire the most complete and technologically and medically advanced update, with an innovative academic program and a human team capable of pushing you professionally to the highest level"

04

Skills

This Hybrid Professional Master's Degree will allow you to acquire the necessary theoretical and practical skills and updated intervention in Gastroenterology and Hepatology of children and adolescents. A very complete approach, in a high-level program, which makes the difference.

At the end of your theoretical course you will have learned the new approaches in Gastroenterology and Hepatology; at the end of your internship you will have incorporated the real way to apply them in a highly efficient medical environment"

General Skills

- Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context
- Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the field of study
- Integrate knowledge and face the challenge of making judgements based on incomplete or limited information. In addition, include reflections on the social and ethical responsibilities linked to implementing this knowledge and judgement
- Know how to communicate their conclusions and the ultimate knowledge and rationale behind them to specialized and non-specialized audiences in a clear and unambiguous manner
- Acquire the learning skills that will enable further studying in a largely self-directed or autonomous manner

Specific Skills

- Describe the advances in the field of food allergy and eosinophilic disorders in detail and their applications in routine clinical practice
- Identify functional digestive disorders and know their characteristics in pediatric age
- Describe the main characteristics of celiac disease in the pediatric age group and incorporate the advances established in recent years
- Incorporating new knowledge and approaches to pediatric inflammatory bowel disease
- Perform a comprehensive approach to esophageal and gastric pathology based on current advances
- Perform an in-depth approach to intestinal pathology based on current knowledge
- Improve knowledge on hepatobiliopancreatic pathology
- Identify the main overlapping elements of pediatric oncology and oncohematology with pediatric gastroenterology
- Incorporate digestive pathology management techniques at a technical level in the diagnostic-therapeutic process, as well as in the monitoring of patients
- Value research and the incorporation of technological advances as the only way to progress in gastroenterology
- Describe current advances and new perspectives that open new avenues of development within pediatric gastroenterology
- Incorporate new technologies into daily practice, knowing their advances, limitations and future potential

05

Course Management

TECH aims to raise the prestige of its students in the area of Pediatric Gastroenterology and Hepatology through this Hybrid Professional Master's Degree. For this reason, it has entrusted the design of its academic modules to the most distinguished experts in the health sector. The teachers of this faculty have chosen an innovative syllabus, based on the most up-to-date technologies and medical protocols. Thus, the physician will be able to assimilate the most recent developments through a guide that is fully customized to his or her educational needs.

All the contents of this program have been chosen by a prominent and respected faculty with extensive experience in the area of Pediatric Gastroenterology and Hepatology"

Management

Dr. Sergio Negre Policarpo

- Specialist in Gastroenterology and Child Nutrition
- Head of the Gastroenterology and Nutrition Service at Móstoles University Hospital Valence
- University Lecturer
- Principal Investigator of Projects in the Pediatrics Area
- More than 60 papers and presentations at national and international congresses
- More than 58 books and book chapters related to Pediatrics.
- Young Investigator Award Excellence in Pediatrics 2009
- End of Residency Award by the La Fe University and Polytechnic Hospital
- Doctor in Pediatrics Cum Laude from the UV
- Specialist Pediatrician
- Degree in Medicine

Professors

Dr. Antonio Pereda López

- Specialist in Pediatric Gastroenterology, La Fe Polytechnic and University Hospital, Valencia, Valencia
- Honorary Partner of the Spanish Association of Pediatrics (AEP)
- Honorary Member of the Spanish Association of Pediatric Gastroenterology, Hepatology and Nutrition (SEGHNP) and of the Valencian Society of Pediatrics (SVP)

Dr. Luis Carlos Blesa Baviera

- President of the Spanish Association of Pediatrics (AEP)
- Pediatrician at the Serrería 2 Health Center of Valencia
- Physician attached to the Valencian Society of Pediatrics (SVP)
- Member of the Nutrition Committee of the AE and member of the Gastroenterology and Nutrition working group of the Spanish Association of Pediatrics in Primary Care (AEPap)
- Pediatrician. Subspecialty in Gastroenterology and Child Nutrition. La Fe Hospital of Valencia
- Degree in Medicine. Faculty of Medicine of the University of Valencia

Dr. Amparo Quiles Catalá
- Pediatrician at San Rafael Hospital
- Instructor at AnidAndo Nurturing
- Pediatrician in the Valencian Government
- MIR Resident from Pediatrics and Specialized Areas of La Ribera University Hospital
- Graduate in Medicine from the UV
- Specialist Pediatrician at Postgraduate Certificate La Ribera Hopistal
- Doctorate in Medicine from the UV

Dr. Alfonso Rodríguez Herrera
- Pediatrician associated with IHP Pediatrics Group
- Specialist in Pediatric Gastroenterology at the Hispalense Institute of Pediatrics of the UPO
- Assistant Physician in the Major Outpatient Surgery Unit at Quirónsalud Hospital
- Contributor to the Chilean Clinical Pediatric Journal

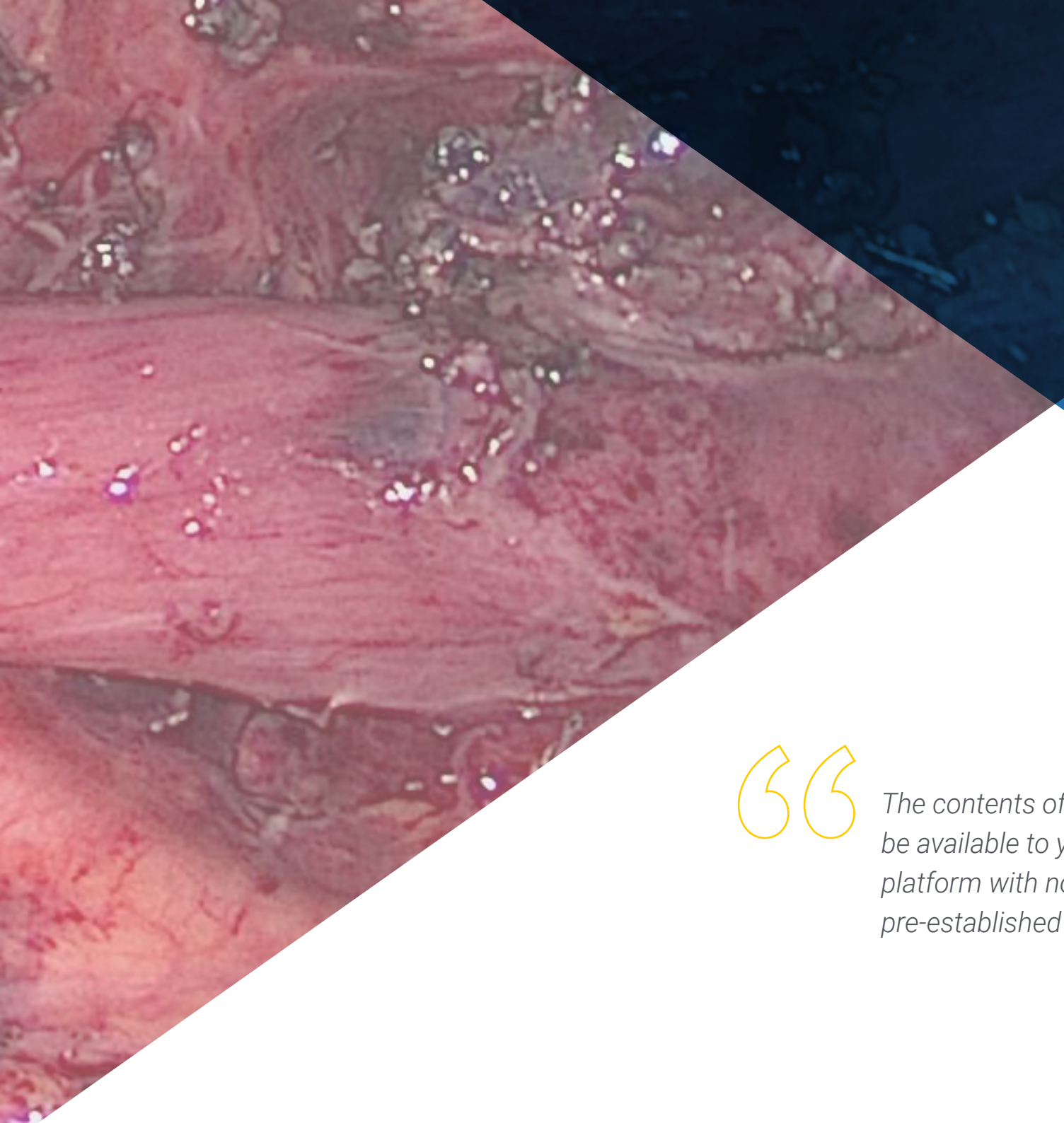
Dr. Mario Alberto Ynga Durand
- Research Physician at Cincinnati Children's Hospital Medical Center. Ohio
- Research Physician at the Helmholtz Centre for Infection Research. Brunswick, Alemania
- Research Physician at the National Polytechnic Institute. Mexico
- Physician in the Allergy and Clinical Immunology Clinic Mexico City
- Researcher at the University of Cincinnati
- Doctor of Medicine, UMSS
- Specialist in Pediatrics from the UNAM
- Specialist in Allergies and Immunology by UAM

Dr. Rafael González de Caldas Marchal
- Gastroenterologist Pediatrician at Hospital Quirónsalud Córdoba
- Physician attached to the Children's Liver Transplant Program at the University Hospital Reina Sofia
- Pediatric Specialist in Gastroenterology, Hepatology and Pediatric Nutrition at the University Hospital Reina Sofía
- Coordinator of the Ultrasound Group, Spanish Society of Gastroenterology, Hepatology Nutrition Pediatric(SEGHNP)
- Degree in Medicine and Surgery from the US
- Master's Degree in and Metabolism Nutrition from UCO
- Master's Degree in Pediatric Nutrition from UGR
- Expert in Obesity from the ULPGC
- Member of the Spanish Society of Liver Transplantation (SETH), Spanish Association of Pediatrics (AEP), Society of Pediatrics of Western Andalusia and Extremadura and the Latin American Society of Pediatric Gastroenterology, Hepatology and Nutrition
- Member of the Coordination and Follow-up Team for Pediatric Liver Transplant Patients of the University Hospital Reina Sofia and the Spanish Society of Pediatric Gastroenterology, Hepatology and Nutrition (SEGHNP)

06

Educational Plan

The syllabus of this program delves into the food allergies and eosinophilic disorders that most affect children and adolescents. In particular, the program examines the latest developments in celiac disease, its treatments and the main modifications that patients and their families need to make to their daily lifestyle. On the other hand, the Hybrid Professional Master's Degree goes deeper into the most complex equipment and techniques for the diagnosis of gastric and hepatic disorders, among which different types of endoscopies are distinguished. At the same time, it analyzes surgical methods of current implementation.



The contents of this program will be available to you from a learning platform with no time restrictions or pre-established evaluation schedules"

Module 1. Advances in Food Allergy and Eosinophilic Disorders

1.1. Update on the Pathophysiological Basis of Food Allergy
1.2. Epidemiological Review of Food Allergy Clinical Presentations
1.3. Clinical Manifestations of Food Allergies and Intolerances
1.4. Diagnosis of Food Allergy A Constantly Evolving Challenge
1.5. Treatment of Food Allergy. Current Outlook
1.6. Prevention of Food Allergy Current and Future Approach
1.7. Primary Eosinophilic Gastrointestinal Disorders Current Situation
1.8. In-depth analysis of the Food Protein Induced Enterocolitis Syndrome (SEIPA-FPIES)
1.9. Diagnosis and Treatment of Eosinophilic Esophagitis and Gastritis

Module 2. Update on Functional Digestive Disorders

2.1. Functional Digestive Disorders: Neurogastroenterology
2.2. Pathophysiology of Functional Digestive Disorders
2.3. The Intestinal Ecosystem in Functional Digestive Disorders
2.4. Multicultural Aspects of Functional Digestive Disorders
2.5. Biopsychosocial Aspects of Functional Digestive Disorders
2.6. Functional Digestive Disorders in Neonates and Infants
2.7. Functional Digestive Disorders in Children and Adolescents
2.8. Diagnostic Studies on Functional Digestive Disorders in Pediatrics
2.9. Pharmacology, Pharmacokinetics and Pharmacogenomics Applied to Functional Digestive Disorders

Module 3. New Perspectives in Celiac Disease

3.1. Advances in the Pathophysiology of Celiac Disease
3.2. Current Epidemiology of Celiac Disease
3.3. Digestive and Extradigestive Clinical Manifestations Associated diseases. Complications of Celiac Disease
3.4. Non-Celiac Gluten Sensitivity
3.5. Diagnosis of Celiac Disease Current Situation and Future Steps
3.6. New Laboratory Tests in Celiac Disease
3.7. Celiac Disease Treatment and Prevention
3.8. Food, Diet and Nutrition in Celiac Disease
3.9. Future Therapeutic Strategies

Module 4. Inflammatory Bowel Disease Present and Future

4.1. Advances in the Pathophysiology of Pediatric Inflammatory Bowel Disease
4.2. Diagnostic Criteria of Pediatric Inflammatory Bowel Disease
4.3. Diagnostic Tests in Pediatric Inflammatory Bowel Disease
4.4. Biological Markers of Activity and Prognosis
4.5. Pediatric Inflammatory Bowel Disease Activity Indices
4.6. Treatment of IBD Pharmacological Treatment. Biological Therapy and Biosimilars
4.7. Nutritional Treatment. Probiotics
4.8. Management of Treatment Algorithms in Ulcerative Colitis and Crohn's Disease
4.9. Management of Perianal Disease and Reservoritis
4.10. Complications of Pediatric Inflammatory Bowel Disease
4.11. Extraintestinal Manifestations of Pediatric Inflammatory Bowel Disease and IBD-Associated Morbidity
4.12. Psychosocial Aspects of Pediatric Inflammatory Bowel Disease Transition Consultation

Module 5. Challenges in Esophageal and Gastric Pathology

5.1. Congenital Esophagogastric Anomalies
5.2. New Approaches to Gastroesophageal Reflux and Esophagitis in Pediatrics
5.3. Achalasia and Other Esophageal Motility Disorders
5.4. Trauma, Infections and Esophagitis Due to Chemicals
5.5. Review of Barrett's Esophagus in Pediatric Ages
5.6. Peptic Ulcer Disease and Gastritis
5.7. Other Esophagogastric Pathologies
5.8. Use of Diagnostic Methods in Esophageal and Gastric Pathologies in Pediatrics
5.9. Emergencies in Oesophagogastric Pathology

Module 6. Update in Intestinal Pathology

6.1. Congenital Intestinal Anomalies
6.2. Disturbances of Digestion and Absorption
6.3. Intestinal Motility Disorders
6.4. Hirschsprung's Disease Intestinal Dysplasias
6.5. Viral and Bacterial Intestinal Infections
6.6. Intestinal Infections due to Parasites
6.7. Fungal Intestinal Infections
6.8. Neonatal Necrotizing Enterocolitis
6.9. Short Bowel Syndrome
6.10. Intestinal Polyps
6.11. Gastrointestinal Manifestations of Systemic Diseases
6.12. Digestive Complications of Congenital Heart Disease
6.13. Extraintestinal Manifestations of Digestive Diseases
6.14. Enteropathies of Unknown Origin Other Enteropathies
6.15. Intestinal Transplant
6.16. Emergencies in Intestinal Pathology

Module 7. Advances in Hepatobiliopancreatic Pathology

7.1. Diagnosis in Liver Disease
7.2. Cholestasis
7.3. Hepatitis
7.4. Autoimmune Liver Diseases
7.5. Metabolic Diseases
7.6. Cystic fibrosis
7.7. Other Liver Diseases
7.8. Complications of Advanced Liver DIsease
7.9. Liver Transplant
7.10. Liver Support Techniques

Module 8. Progress in Digestive and Hepatic Oncology

8.1. The Digestive Tract in Pediatric Oncohematology
8.2. Pediatric Gastrointestinal Neoplasms I (From Esophagus to Duodenum
8.3. Pediatric Gastrointestinal Neoplasms II (From Jejunum to Anus)
8.4. Liver Tumors in Pediatrics
8.5. Primary Peritoneal Tumors and Peritoneal Carcinomatosis in Children
8.6. Gastrointestinal Complications of Chemotherapy in Children
8.7. Oncologic Abdominal Emergencies
8.8. Gastrointestinal Opportunistic Infections
8.9. Palliative Care in Children With Digestive Tumors

Module 9. Techniques in Pediatric Gastroenterology

9.1. Nutritional Assessment
9.2. Biochemical Determinations in Blood, Urine, Feces and Sweat
9.3. Digective Endoscopy. Esophago-Gastroscopy and Colonoscopy in Pediatrics
9.4. Biopsies
9.5. Exhaled Air Test
9.6. Capsuloendoscopy in Pediatrics
9.7. Endoscopic Retrograde Cholangiopancreatography
9.8. Malabsorption and Pancreatic Insufficiency Studies
9.9. Gastrointestinal Tract Radiology
9.10. Gastrointestinal and Hepatobiliary Ultrasound
9.11. Endorectal Ultrasound in Pediatrics
9.12. Abdominal Computed Tomography and MRI in Pediatric Gastroenterology
9.13. Radioisotope Studies
9.14. Anorectal and Esophageal Manometry
9.15. Esophageal PH-Metry and Impedanciometry
9.16. Microbiological Studies
9.17. Molecular Biology Techniques
9.18. Exploratory laparoscopy

Module 10. Gastrohepatology: New Paths Opening the Door to Innovation

10.1. Chronobiology and Digestive Physiopathology
10.2. Epigenetics and Pediatric Gastroenterology
10.3. The Role of Intestinal Microbiota in Childhood Health and Illness
10.4. Study of the Intestinal Microbiota Probiotic Therapy in Pediatrics
10.5. Diet and Microbiota Impact on Health
10.6. Obesity and Digestive System Molecular, Genetic and Microbiological Approach to a Current Epidemic
10.7. Advances in Diagnostic Instruments Narrow-Band Endoscopy and Fluorescence Endoscopy Chromoendoscopy, Confocal Endoscopy and 360º Vision
10.8. Telemedicine Applications in the Education and Monitoring of Patients With Digestive Pathologies Wearables
10.9. Social Media and Pediatric Gastroenterology

A unique, key and decisive educational experience to boost your professional development that will put you at the forefront of the professional world"

07

Clinical Internship

After passing the online update period, the program includes a practical training period in a reference hospital. The physician will have at their disposal the support of a tutor who will accompany them throughout the process, both in the preparation and in the development of the clinical practices.

Broaden your professional horizons through an intensive on-site internship in a rigorous and demanding medical institution"

The Internship Program consists of a 3-week clinical internship, Monday through Friday, with 8 consecutive hours of practice with an attending specialist. This stay will allow you to see real patients alongside a team of reference professionals applying the most innovative diagnostic procedures and planning the latest generation of therapy for each pathology.

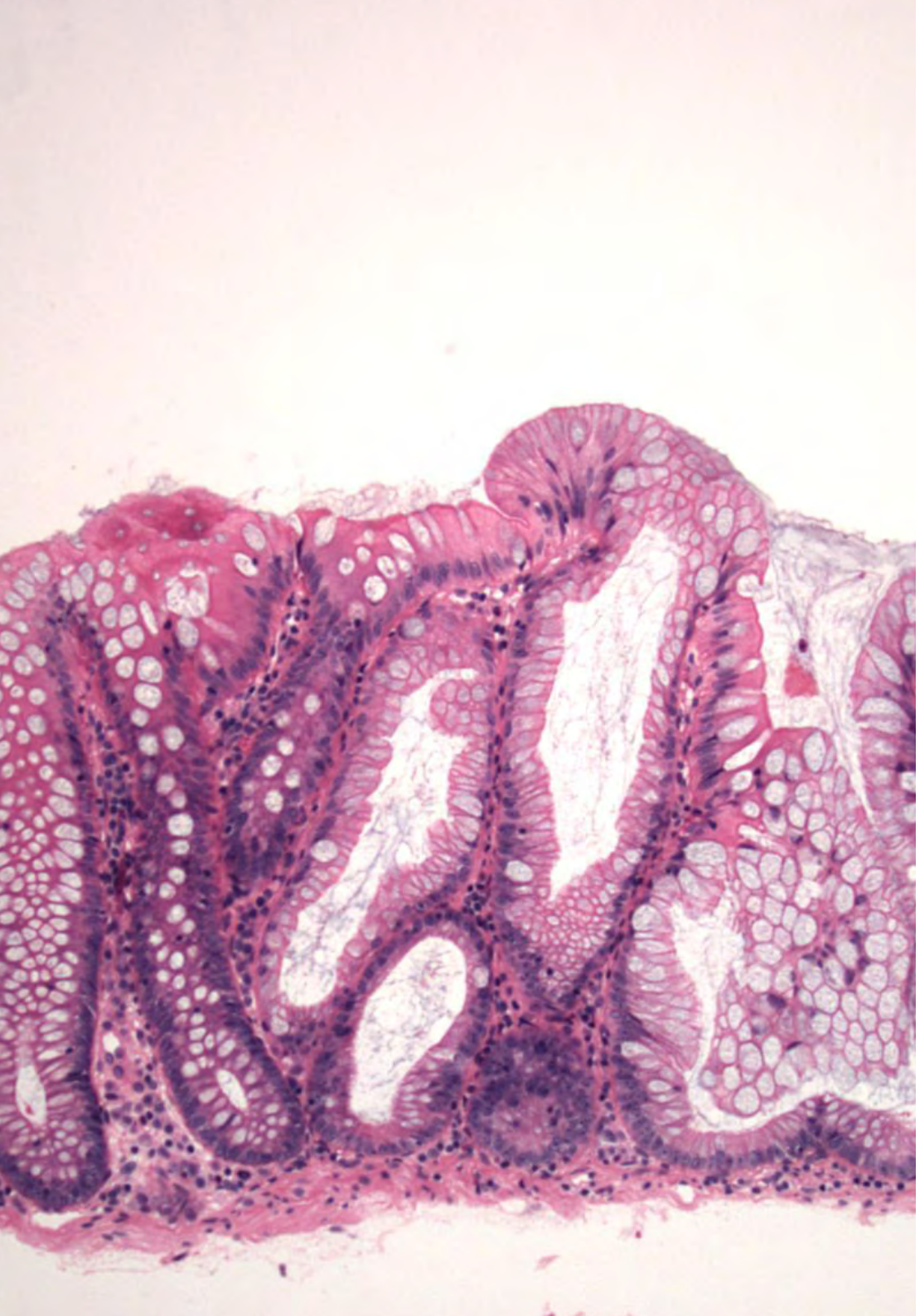
In this training proposal, completely practical in nature, the activities are aimed at developing and perfecting the competencies necessary for the provision of health care in areas and conditions that require a high level of qualification, and which are oriented towards specific training for the exercise of the activity, in an environment of patient safety and high professional performance.

It is undoubtedly an opportunity to learn by working in the innovative hospital of the future where real-time health monitoring of patients is at the heart of the digital culture of its professionals. This is a new way of understanding and integrating health processes in an ideal teaching scenario for this innovative experience in the improvement of professional medical competencies in the 21st century.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for medical practice (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the training, and their completion is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

“All the areas of study that the professional involved in Gastroenterology and Hepatology must master will be covered in a structured and efficient way, providing the student with the necessary intellectual and material resources”



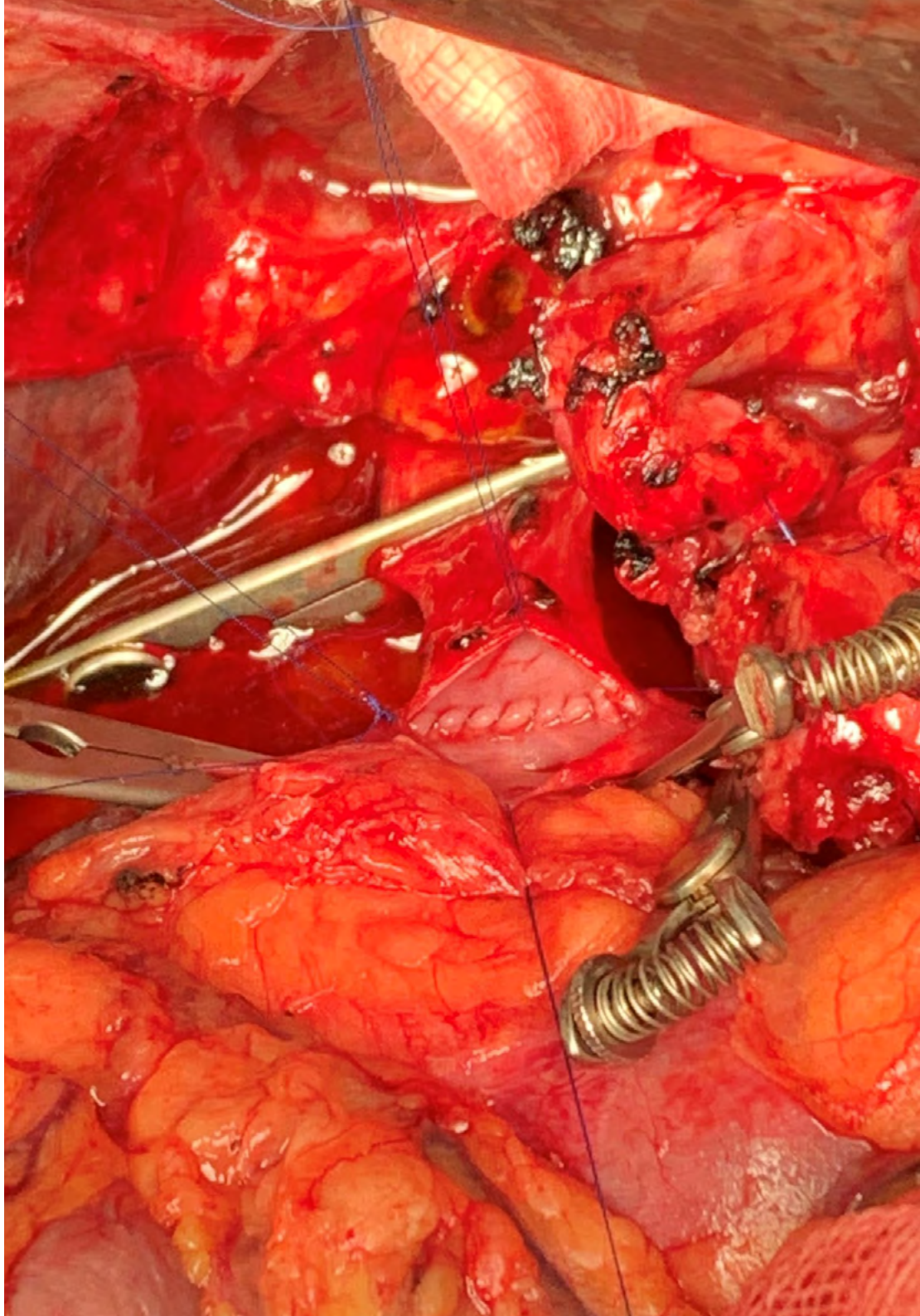
Module	Practical Activity
Advances in Food Allergy and Eosinophilic Disorders	Indicate gastrointestinal endoscopy to identify primary eosinophilic disorders
	Apply absolute eosinophil counts to patients with signs of an allergic reaction to food
	Perform oral tolerance test to child patients with suspected food allergy
	Subjecting the child patient under analysis to an elimination diet
	Use skin allergy testing in pediatric patients with mild signs of food intolerance
	Diagnose eosinophilic disorders and derived allergies from IgE blood tests IgE blood tests
Latest trends in inflammatory bowel disease	Define IBD from flexible colonoscopies and sigmoidoscopies
	Use biological markers of activity and prognosis to determine the presence of IBD
	Indicate biologic therapy and biosimilars against IBD
	Manage treatment algorithms in ulcerative colitis and Crohn's disease
	Apply gastrointestinal tract analysis by X-ray and barium scans
	Perform surgical procedures such as colostomy, total proctocolectomy (with and without ileoanal pouch) and large bowel resection
Challenges in esophageal and gastric pathology	Apply abdominal radiology to determine duodenal atresia in newborns and other esophageal and gastric congenital anomalies
	Diagnose Hirschsprung's disease by barium enema tests and biopsies of the rectum
	Determine the presence of colorectal polyps by stool examination for fecal occult blood
	Treat trauma, infections and esophagitis due to chemicals in children with different procedures, including surgical ones
Advances in hepatobiliopancreatic pathology and other gastrohepatic disorders	Diagnosis of cystic fibrosis through fecal elastase
	Perform analytical tests for advanced autoimmune liver disease
	Use of probiotic therapy techniques in pediatrics
	Implement narrow band, fluorescence and confocal endoscopies to diagnose different gastrohepatological disorders
Latest techniques in pediatric gastroenterology	Apply asendoscopy in children
	Indicate and interpret radioisotope studies for different pediatric intestinal disorders
	Implement and interpret pH-metry and esophageal impedancemetry in children and adolescents
	Perform gastrointestinal and hepatobiliary ultrasound to study malabsorption and pancreatic insufficiency

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this educational entity undertakes to take out civil liability insurance to cover any eventuality that may arise during the stay at the internship center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. In this way, the professional will not have to worry in case he/she has to face an unexpected situation and will be covered until the end of the practical program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Internship Program, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Professional Master Program will receive a certificate accrediting their time spent at the center.

5. EMPLOYMENT RELATIONSHIP: The Hybrid Professional Master Program shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Clinical Internship?

The on-site stay of this Hybrid Professional Master's Degree will take place in the most prestigious hospitals in the area of Pediatric Gastroenterology and Hepatology. These facilities stand out for the implementation of state-of-the-art technological resources within their care units.

At the same time, they have professionals of international stature who will support the doctor at all times, throughout the 3 weeks of this clinical practice.

Train in a state-of-the-art hospital, with an innovative academic program and a human team capable of developing you professionally at the highest level"

The student will be able to take the practical part of this Hybrid Professional Master's Degree in the following centers:

Hospital HM Modelo

Country: Spain
City: La Coruña

Address: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:
- Anaesthesiology and Resuscitation
- Palliative Care

Hospital Maternidad HM Belén

Country: Spain
City: La Coruña

Address: R. Filantropía, 3, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:
- Update in Assisted Reproduction
- Hospitals and Health Services Management

Hospital HM Montepríncipe

Country: Spain
City: Madrid

Address: Av. de Montepríncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:
- Palliative Care
- Aesthetic Medicine

Hospital HM Torrelodones

Country: Spain
City: Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:
- Anaesthesiology and Resuscitation
- Palliative Care

Hospital HM Puerta del Sur

Country: Spain
City: Madrid

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:
- Palliative Care
- Clinical Ophthalmology

Policlínico HM Sanchinarro

Country: Spain
City: Madrid

Address: Av. de Manoteras, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:
- Gynecological Care for Midwives
- Nursing in the Digestive Tract Department

09

Methodology

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

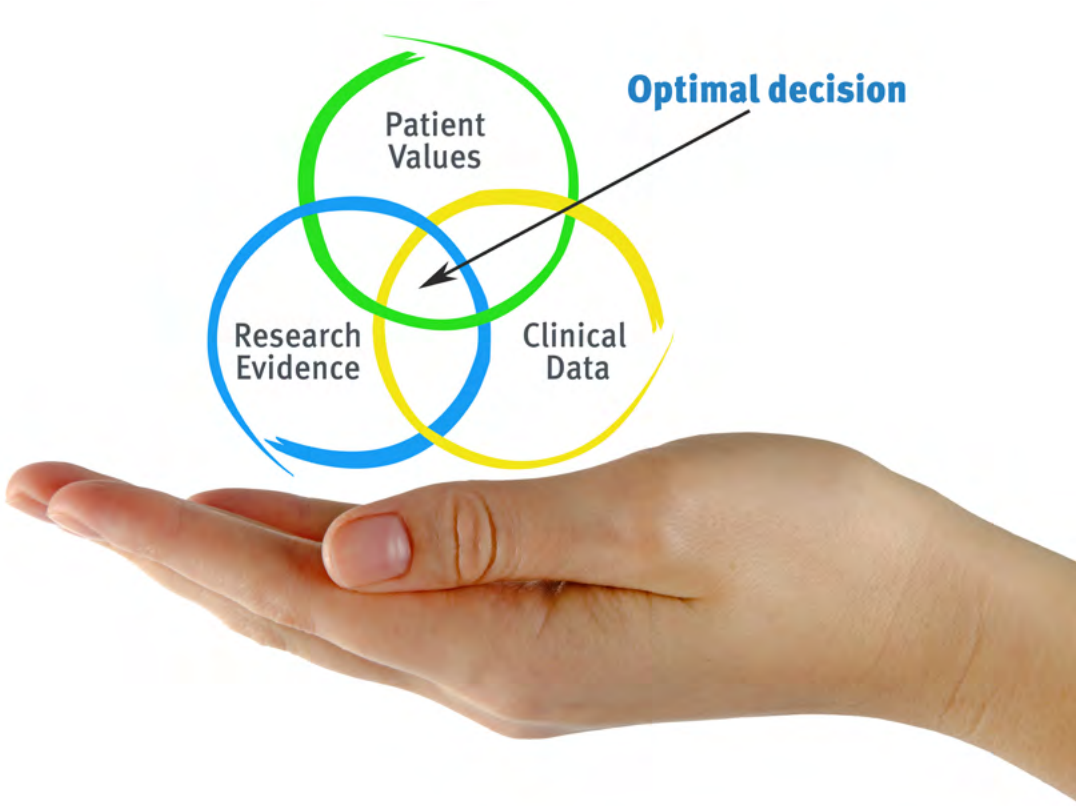
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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:

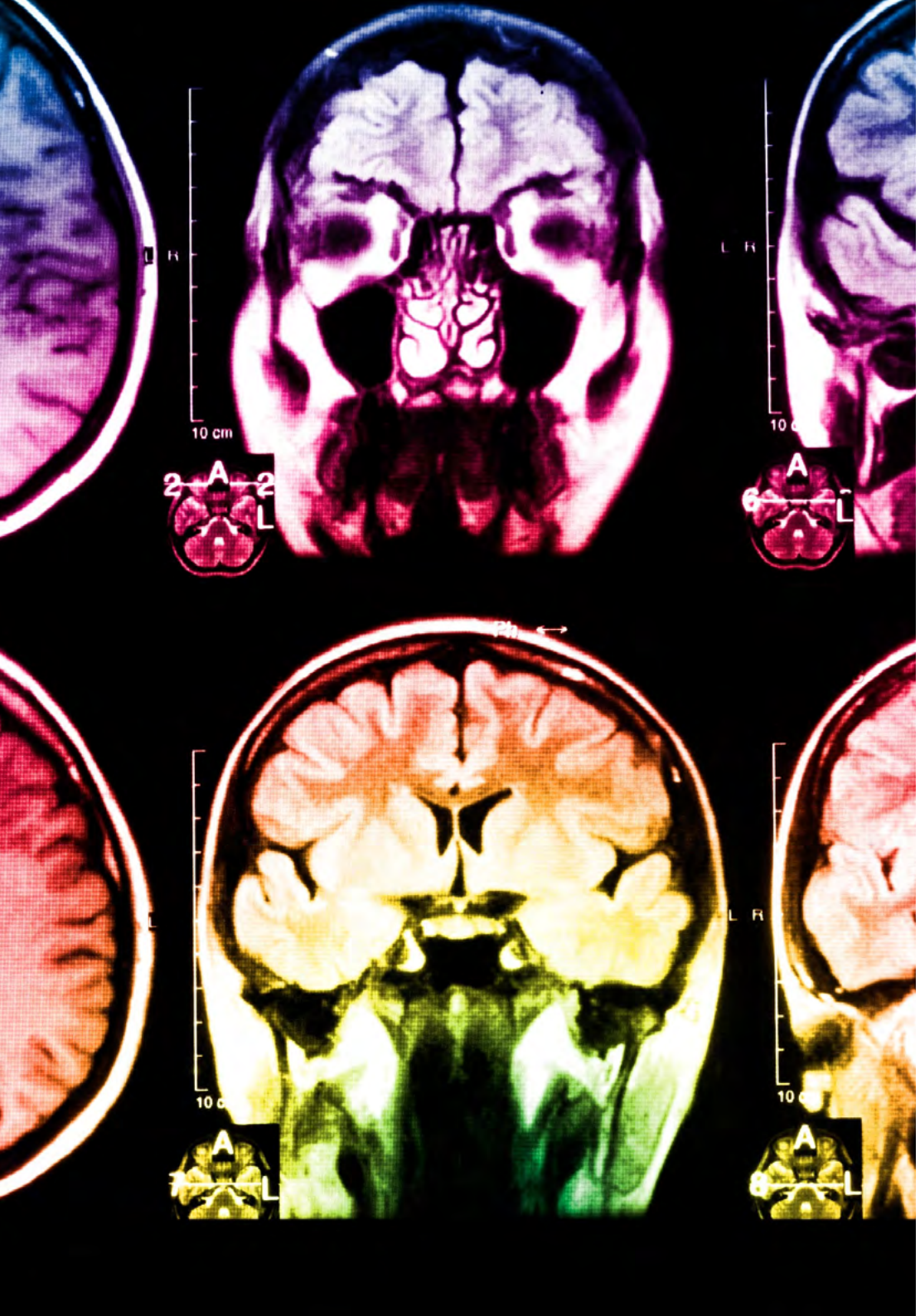
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better 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.

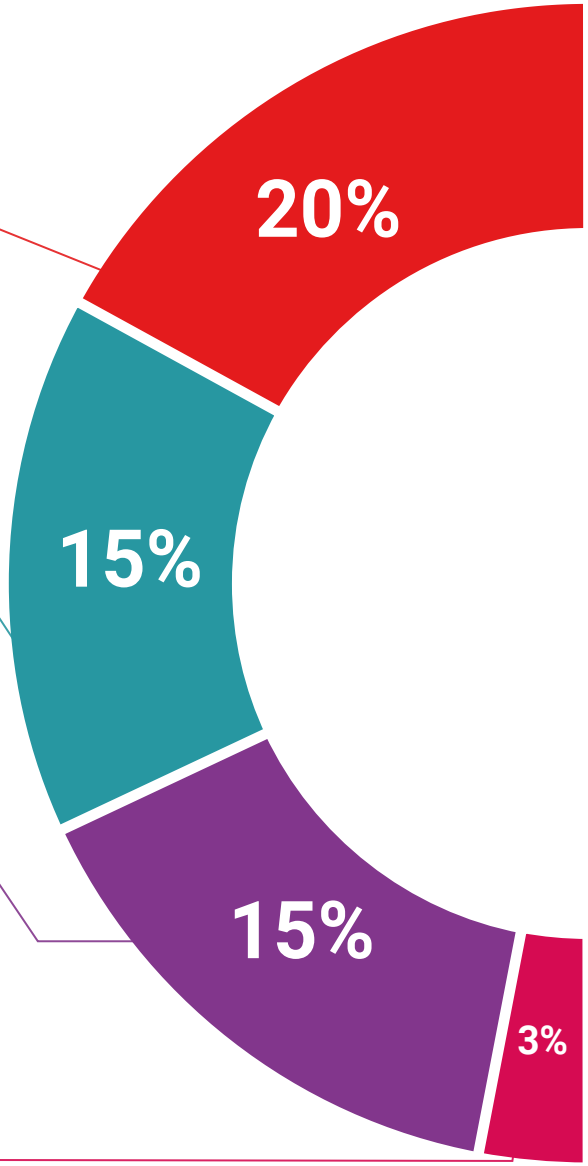
Interactive Summaries

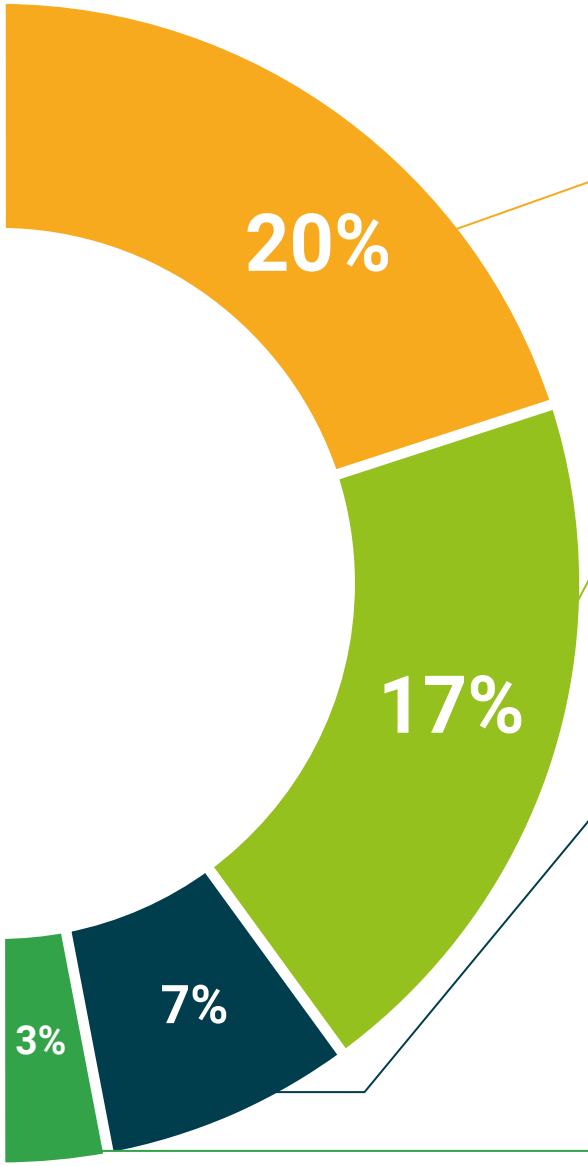
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.

10

Certificate

The Hybrid Professional Master's Degree in Advances in Pediatric Gastroenterology and Hepatology guarantees, in addition to the most rigorous and up-to-date training, access to a Hybrid Professional Master's Degree issued by TECH Technological University.

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

This **Hybrid Professional Master's Degree in Advances in Pediatric Gastroenterology and Hepatology** contains the most complete and updated program in the professional and academic panorama.

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree Certificate issued by TECH Technological University via tracked delivery*.

In addition to the diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.

Program: **Hybrid Professional Master's Degree in Advances in Pediatric Gastroenterology and Hepatology**

Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Technological University**

Teaching Hours: **1,620 h.**

tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having successfully passed and accredited the following program

HYBRID PROFESSIONAL MASTER'S DEGREE

in

Advances in Pediatric Gastroenterology and Hepatology

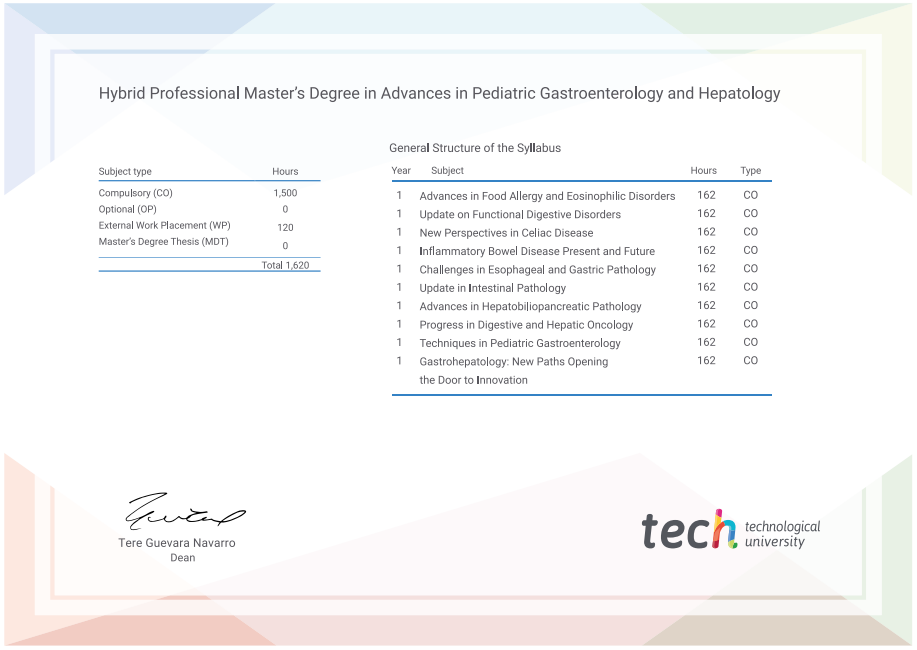
This is a qualification awarded by this University, with a duration of 1,620 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates



Hybrid Professional Master's Degree in Advances in Pediatric Gastroenterology and Hepatology

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	120
Master's Degree Thesis (MDT)	0
	Total 1,620

General Structure of the Syllabus

Year	Subject	Hours	Type
1	Advances in Food Allergy and Eosinophilic Disorders	162	CO
1	Update on Functional Digestive Disorders	162	CO
1	New Perspectives in Celiac Disease	162	CO
1	Inflammatory Bowel Disease Present and Future	162	CO
1	Challenges in Esophageal and Gastric Pathology	162	CO
1	Update in Intestinal Pathology	162	CO
1	Advances in Hepatobiliopancreatic Pathology	162	CO
1	Progress in Digestive and Hepatic Oncology	162	CO
1	Techniques in Pediatric Gastroenterology	162	CO
1	Gastrohepatology: New Paths Opening the Door to Innovation	162	CO

Tere Guevara Navarro
Dean

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

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Hybrid Professional Master's Degree

Advances in Pediatric Gastroenterology and Hepatology

Modality: **Hybrid (Online + Clinical Internship)**
Duration: **12 months**
Certificate: **TECH Technological University**
Teaching Hours: **1,620 h.**

Hybrid Professional Master's Degree

Advances in Pediatric Gastroenterology and Hepatology

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