

# Hybrid Professional Master's Degree

## Obstetric and Gynecological Ultrasound



## Hybrid Professional Master's Degree

### Obstetric and Gynecological Ultrasound

Course 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-obstetric-gynecological-ultrasound](http://www.techtitute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-obstetric-gynecological-ultrasound)

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# 01

# Introduction

The improvement of ultrasound devices has led to a variety of advanced imaging features with real-time 3D or 4D ultrasound. In addition, integration with other technologies facilitates the exchange of information between hospitals, improving efficiency and patient follow-up. In this sense, specialists in Obstetrics and Gynecology have seen in recent years how the most sophisticated ultrasound techniques increase their field of action and diagnostic capacity. For this reason, this program combines the most updated theoretical framework with a practical stay 100% face-to-face in an avant-garde clinical center, which is distinguished by having the best experts in this health field



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*You will be able to update your knowledge on  
Obstetric and Gynecological Ultrasound through  
the best Hybrid Professional Master's Degree”*

In an era marked by technology, the field of Gynecology has benefited, especially in the diagnostic field. In this sense, ultrasound devices have improved image quality and resolution, as well as their dimensions, which facilitate their use in any clinical space. These benefits have a direct impact on the detection of pathologies and better patient follow-up.

For this reason, specialists are constantly updating their technical skills in this field. Therefore, this 12-month Hybrid Professional Master's Degree in Obstetric and Gynecological Ultrasound was born, designed and developed by an excellent teaching team with extensive experience in this medical field.

This is a program that will lead the graduates to obtain an effective update on the use of ultrasound for the assessment of certain gynecological diseases, for the performance of echocardiographic and neurosonographic studies. All this, through innovative multimedia didactic material and clinical case studies, accessible 24 hours a day, from any digital device with an Internet connection.

The culmination of this program is the practical phase, which will allow the professionals to carry out a practical stay of 3 weeks in a first level health space in this field. In this unique experience, students will be able to integrate all the concepts covered in the theoretical phase directly and with real patients.

The physicians are faced with an unparalleled academic option that adapts to their daily personal activities and at the same time provides a direct response to their needs for updating their skills in the field of Obstetric and Gynecologic Ultrasound.

This **Hybrid Professional Master's Degree in Obstetric and Gynecological Ultrasound** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ Development of more than 100 clinical cases presented by gynecologists and obstetricians, experts in ultrasound techniques in pregnant patients or patients with gynecological pathologies
- ♦ Its graphic, schematic and eminently practical contents with which they are conceived, collect scientific and assistance information on those medical disciplines indispensable for professional practice
- ♦ Patient assessment and application of the latest international recommendations when detecting fetal anomalies or pathologies that seriously affect women's health
- ♦ Comprehensive systematized action plans for the main pathologies in the field of gynecology
- ♦ Presentation of practical workshops on diagnostic and therapeutic techniques in the gynecological patients
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Practical clinical guides on approaching different pathologies
- ♦ With a special emphasis on evidence-based medicine and research methodologies in Obstetric and Gynecological Ultrasound
- ♦ All of 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

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*Take an intensive 3-week internship in a prestigious center and acquire all the knowledge to grow personally and professionally”*

In this proposal for a Hybrid Professional Master's Degree, of a professionalizing nature and blended learning modality, the program is aimed at updating nursing professionals who perform their functions in intensive care units, and who require a high level of qualification. The content is based on the latest scientific evidence and is organized in a didactic way to integrate theoretical knowledge into nursing practice. The theoretical-practical elements allow professionals to update their knowledge and help them to make the right decisions in patient care.

Thanks to its multimedia content elaborated with the latest educational technology, they will allow the Gynecology professional to obtain a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train 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 students will be assisted by an innovative interactive video system created by renowned experts.

*Access, whenever and wherever you want to the most innovative didactic material through any digital device with an Internet connection.*

*Get an effective update on ultrasound techniques in obstetrics and gynecology from the best specialists in this field.*



# 02

## Why Study this Hybrid Professional Master's Degree?

In the educational market there are numerous programs that focus their efforts on providing theoretical knowledge. However, in this proposal, TECH has decided to combine the most rigorous information based on scientific evidence, with a practical phase in a clinical center of great prestige. In this sense, the graduates will obtain a much more complete and comprehensive vision of Obstetric and Gynecological Ultrasound in just 12 months. This process will allow them to integrate into their daily practice the latest advances in this field, under the guidance of a specialized teaching team and guided during the stay by professionals with extensive experience in the field of ultrasound and the latest technology applied in this specialty.





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*TECH will take you to a unique experience in a renowned clinical center with expert professionals in Obstetric and Gynecological Ultrasound”*

### 1. Updating from the latest technology available

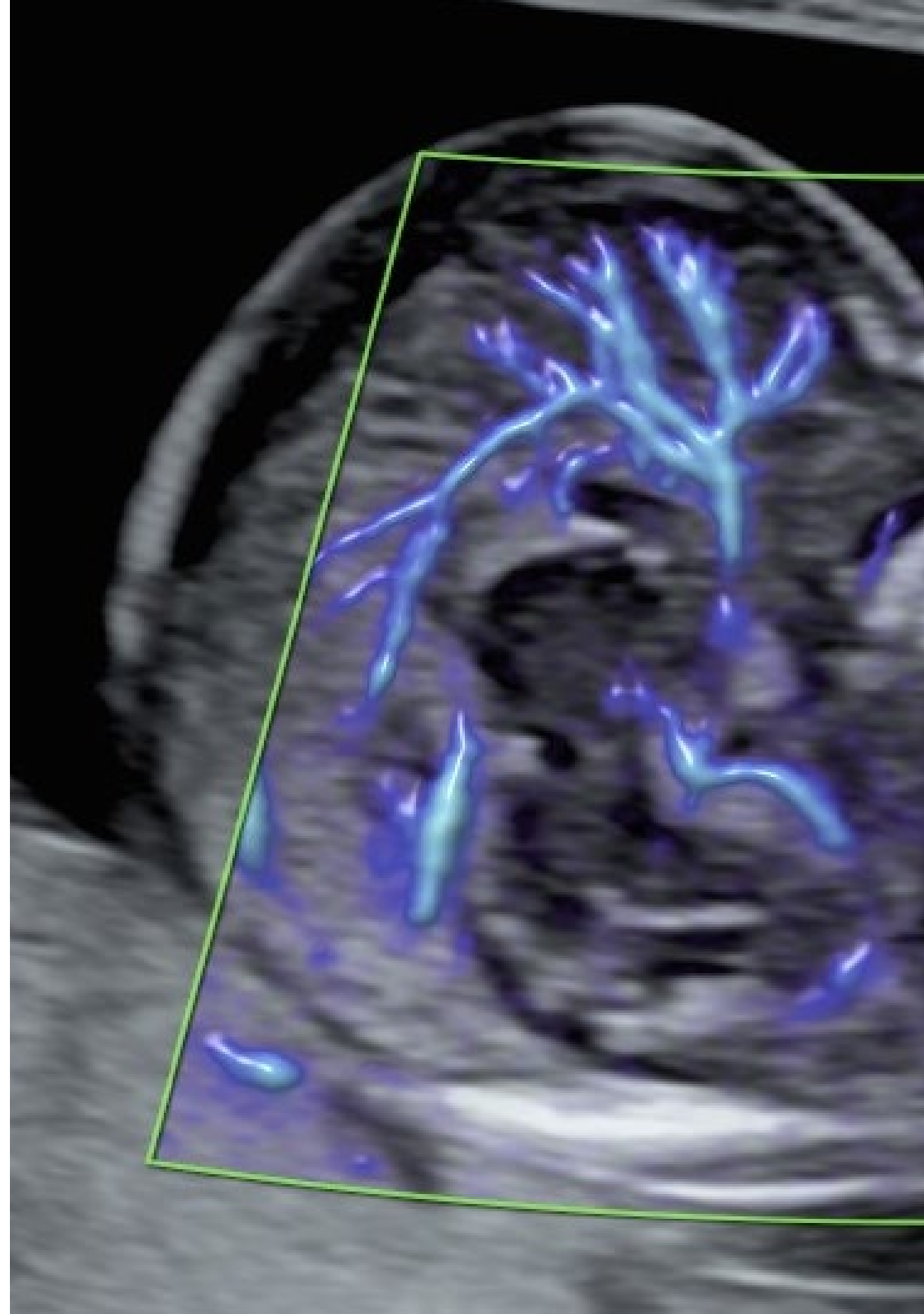
The area of Gynecology and Obstetrics has undergone an important evolution thanks to the development and improvement of ultrasound equipment, which provides 3D or 4D images, giving greater realism and detail. For this reason, in this academic experience the graduates will have the opportunity to get an update on these advances and, in addition, to access them through a first level clinical center in this field. An ideal opportunity to bring the specialists closer to state-of-the-art technology

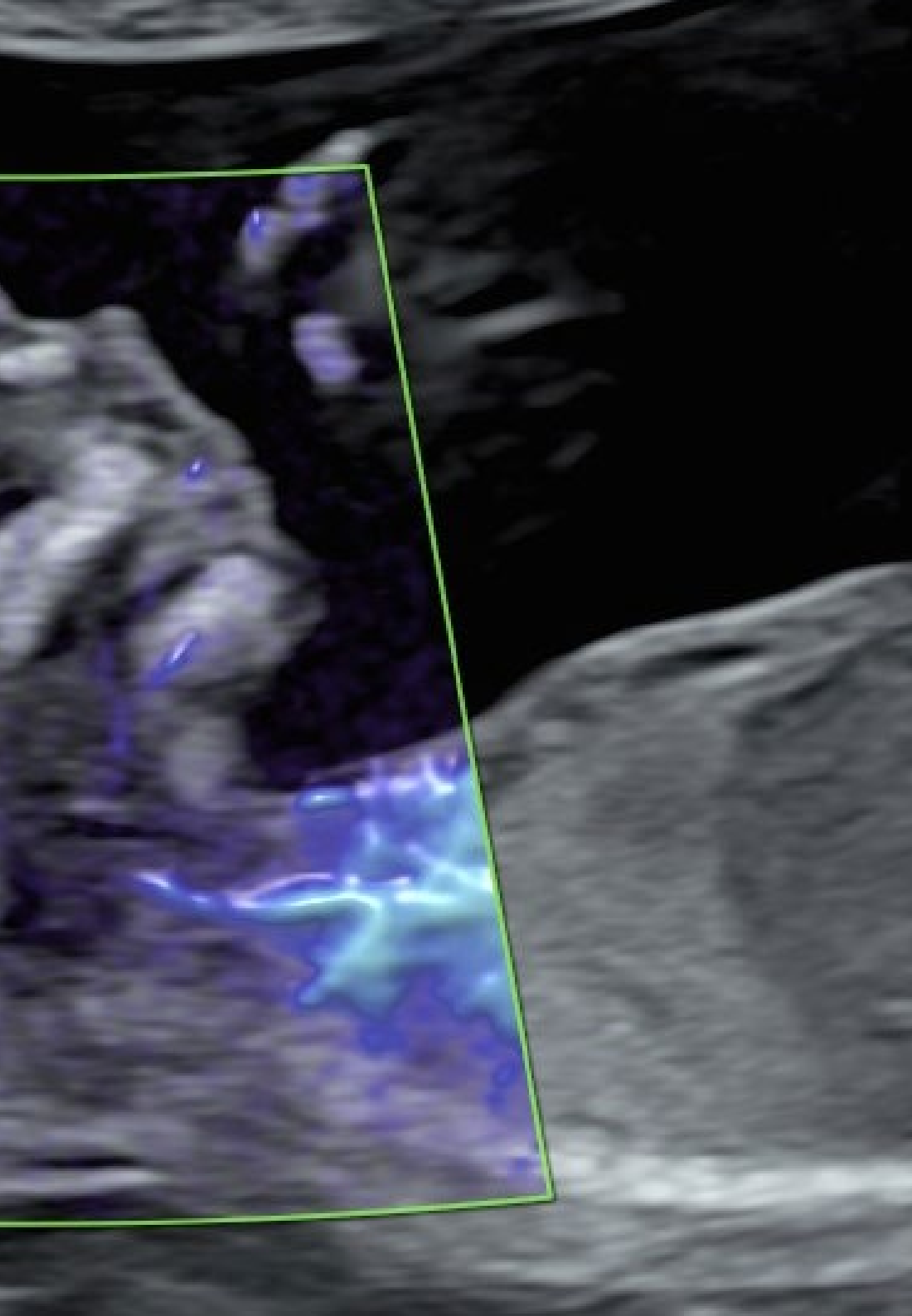
### 2. Gaining In-Depth Knowledge from the Experience of Top Specialists

In this academic program, the graduates will have at their disposal a syllabus prepared by a team of experts in Obstetric and Gynecological Ultrasound. At the same time, during the stay they will be guided by a team of specialists who will show them in situ, the various techniques used for the detection of pathologies and the necessary skills to perform them in pregnant patients or women who present various gynecological diseases

### 3. Entering First-Class Clinical Environments

TECH carefully selects all available centers for Internship Programs. Thanks to this, the specialists will have guaranteed access to a prestigious clinical environment in the area of Assisted Reproduction. In this way, you will be able to see the day-to-day work of a demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in its work methodology





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

In the health area it is necessary to have a solid knowledge, but at the same time it must be put into practice. For this reason, this institution has decided to combine a theoretical framework 100% online, with a practical stay 100% face-to-face with specialists that will provide the graduates with the most advanced experience in a distinguished healthcare environment

#### 5. Expanding the Boundaries of Knowledge

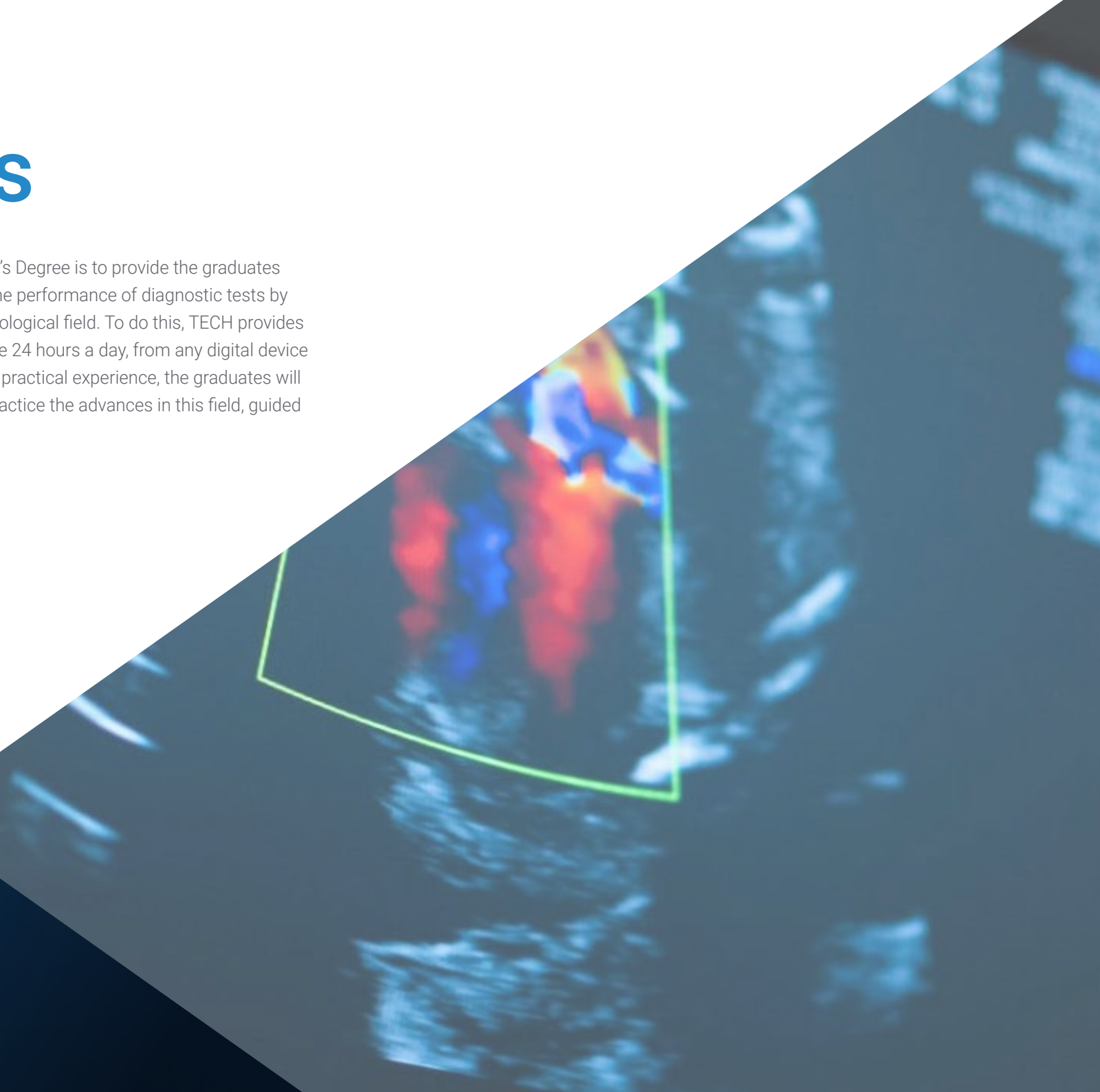
This Hybrid Professional Master's Degree is an opportunity for graduates to update their skills in a first-class environment, where they will find specialists who have worked in national and international hospitals. All this allows them to further extend their capacity for action in any other healthcare area in the world. A unique opportunity that only TECH, the world's largest digital university could offer



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

# 03 Objectives

The purpose of this Hybrid Professional Master's Degree is to provide the graduates with the possibility of enhancing their skills in the performance of diagnostic tests by means of ultrasound in the obstetric and gynecological field. To do this, TECH provides a multitude of educational resources, accessible 24 hours a day, from any digital device with an Internet connection. Also, thanks to the practical experience, the graduates will strengthen their skills and integrate into their practice the advances in this field, guided by the best experts.



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*Update yourself through the most advanced and innovative didactic material of the present academic panorama”*



## General Objective

- Thanks to this program, the specialists will be up to date with the ultrasound techniques used for the detection of malformations during the first trimester of gestation, the pathologies that can be diagnosed in the trimester or the study of the most frequent cardiac pathologies. A wide range of fields of analysis will be possible through the theoretical and practical perspective of this academic option



*You will be able to integrate in your practice the most effective procedures for the detection of malformations during the first trimester of pregnancy”*





## Specific Objectives

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### Module 1. Ultrasound. Normal study in gynecology

- ♦ Understand thoroughly the normal anatomy in gynecology
- ♦ Learn the basic principles of ultrasound and the operation of the ultrasound machine and its different applications
- ♦ Learn how to use Doppler correctly and to know its technical aspects
- ♦ Have an in-depth knowledge of the applications of 3D and 4D ultrasound in gynecology and obstetrics, as well as the management of offline volumes
- ♦ In-depth knowledge of the main lines of research in gynecological ultrasound

### Module 2. Pathology of the endometrium, myometrium and cervix

- ♦ Understand and differentiate between benign and malignant endometrial pathology
- ♦ Study the usefulness of gynecological ultrasound after an abortion
- ♦ Study and differentiate between benign and malignant myometrial pathology
- ♦ Learn about the diagnosis of adenomyosis
- ♦ Study the most prevalent pathology of the cervix diagnosable by ultrasound
- ♦ Learn the most prevalent pathology of the vagina diagnosable by ultrasound
- ♦ Understand in depth the basic aspects of gynecologic ultrasound study in pediatric age

### Module 3. Ovarian Pathology, Endometriosis and Pain

- ♦ Understand and differentiate between benign and malignant endometrial pathology
- ♦ Study the tubal pathology diagnosable by ultrasound
- ♦ Get to know in depth the pelvic congestion syndrome and the usefulness of ultrasound for its diagnosis
- ♦ Learn the usefulness of ultrasound for the diagnosis of ovarian and extraovarian endometriosis
- ♦ Understand in depth the role of ultrasound in the follow-up and treatment of chronic pelvic pain
- ♦ Study the main uses of interventional ultrasound

### Module 4. Reproduction and pelvic floor

- ♦ Understand in depth the usefulness of ultrasound in the diagnosis of infertility
- ♦ Study the main uterine malformations and their ultrasound diagnosis
- ♦ Understand the applications of 3D ultrasound in assisted reproduction and its treatment
- ♦ Learn the anatomy of the pelvic floor and its evaluation by ultrasound
- ♦ Study the ultrasound diagnosis of the main pelvic floor pathologies, mainly genital prolapse and urinary incontinence

### **Module 5. First Trimester Ultrasound**

- ♦ Understand the normal ultrasound study of the first trimester ultrasound
- ♦ Study ultrasound of uncertain location and its management, as well as the usefulness of ultrasound study in the management of early gestation
- ♦ Understand the main first trimester ultrasound markers, both of aneuploidy and of other pathologies
- ♦ Learn the main malformations that can be diagnosed in the first trimester
- ♦ Have an in-depth knowledge of aneuploidy screening and first trimester preeclampsia screening
- ♦ Understand the use of fetal DNA in maternal blood, as well as the basic principles of genetics in obstetrics

### **Module 6. Second Trimester Ultrasound**

- ♦ Learn in depth the second trimester ultrasound study protocol, its basic sections and normality
- ♦ Study the spectrum of placenta accreta and the keys to an accurate ultrasound diagnosis
- ♦ Learn about cervical assessment by ultrasound and the risk of preterm labor in the second trimester
- ♦ Identify ultrasound markers of second trimester aneuploidy
- ♦ Understand the main malformations that can be diagnosed in the second trimester by apparatus and systems
- ♦ Study the main ultrasound features of fetal hydrops and its management

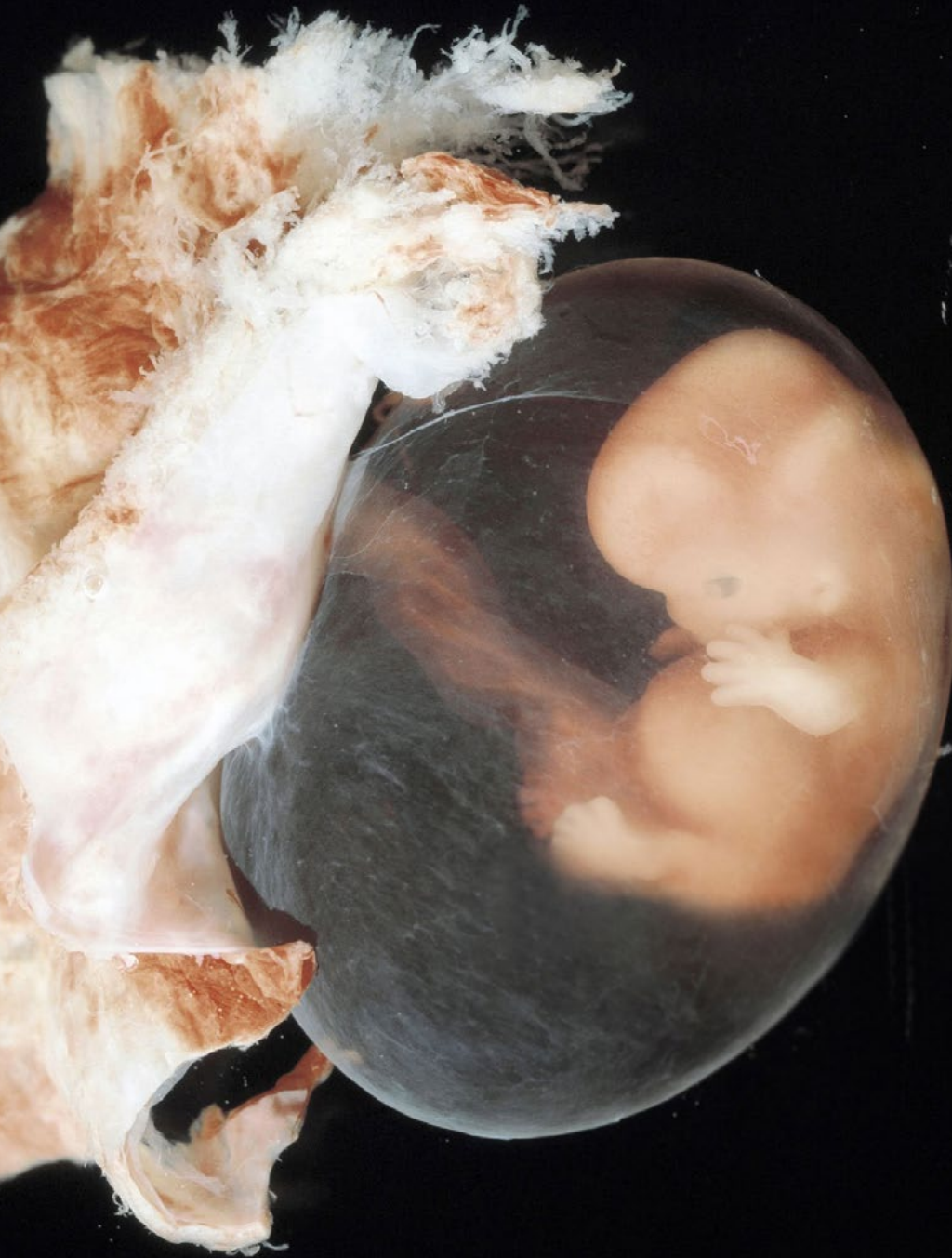
### **Module 7. Third Trimester Ultrasound**

- ♦ Learn the third trimester ultrasound study protocol, its basic sections and normality
- ♦ Study the most frequent malformations that can be diagnosed in the third trimester
- ♦ Learn how to correctly estimate fetal growth and how to use Doppler in the third trimester for a correct diagnosis of growth defects (SGA and RIC)
- ♦ Understand the fetal hypoxic cascade and fetal hemodynamics
- ♦ Study the usefulness and main applications of intrapartum ultrasound
- ♦ Understand the main alterations of the amniotic fluid and its management

### **Module 8. Multiple Gestation**

- ♦ Study the embryology of multiple gestation in order to correctly understand its classification and ultrasound diagnosis
- ♦ Learn in depth the ultrasound diagnosis and follow-up of dichorionic and monochorionic twin gestation
- ♦ Learn how to correctly diagnose the main alterations of monochorionic gestation (TAPS, TRAP and TFF)
- ♦ Understand how to diagnose and follow up on growth retardation in twin gestation in monochorionic and dichorionic twin gestation
- ♦ Study screening for preeclampsia and preterm delivery in twin gestation in twin gestation
- ♦ Study the consequences of twin death and how to manage this condition





### Module 9. Fetal Echocardiography

- ♦ Study the normal morphological and functional echocardiographic study and its main echocardiographic sections
- ♦ Understand comprehensively the alterations of the right and left heart, their diagnosis and prognosis
- ♦ Learn the main conotruncal anomalies, their diagnosis and prognosis
- ♦ Understand in depth the main anomalies of venous return, their diagnosis and prognosis
- ♦ Study the main anomalies of cardiac position and situs, their diagnosis and implications

### Module 10. Fetal neurosonography

- ♦ Study the normal neurosonographic study and its main ultrasound sections
- ♦ Study the diagnosis of ventriculomegaly, its diagnosis and prognosis
- ♦ Know in depth the midline anomalies in the central nervous system, their diagnosis and prognosis
- ♦ Learn the main anomalies of the posterior fossa, their diagnosis and prognosis
- ♦ Learn the main cystic pathologies of the central nervous system, their diagnosis and prognosis
- ♦ Study the main hemorrhagic or ischemic pathologies of the central nervous system, their diagnosis and prognosis
- ♦ Learn the main tumors of the central nervous system and their correct ultrasound diagnosis
- ♦ Learn the main applications of fetal MRI in the study of the central nervous system

# 04 Skills

This program will provide the specialists with an update on the ultrasound methods used by the best experts for the study and analysis of gynecological pathologies or in the follow-up of pregnant patients, who may present various difficulties during gestation, both for the woman and the fetus. For this, not only has a practical stay, but also with numerous clinical case studies, which will put the graduates in situation.



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*With this program you will be up to date with the most advanced technology used by the best clinical centers in the Gynecological and Obstetric area”*



## General Skills

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- Master the second trimester ultrasound and the diagnosable malformations as well as their etiology and prognosis
- Address the main pathologies of the endometrium, myometrium, cervix and ovary
- Apply ultrasound in assisted reproduction and pelvic floor pathology, using 3D ultrasound
- Effectively manage intrapartum ultrasound, mastering ultrasound in gynecologic emergencies



*You have clinical case studies, facilitated by the excellent teaching team that integrates this Hybrid Professional Master's Degree"*





## Specific Skills

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- ♦ Manage complementary techniques such as sonohysterography and sonovaginography
- ♦ Master the ultrasound study of myomas and their therapeutic approach
- ♦ Use ultrasound for the study of extension in oncologic patients
- ♦ Develop the main uses of ultrasound in the post-surgical follow-up of pelvic floor surgery, including the study of meshes
- ♦ Apply the main invasive techniques in obstetrics, covering their procedure and indications
- ♦ Advanced treatment of the main pathologies of the umbilical cord and placenta
- ♦ Diagnose and manage fetal macrosomia
- ♦ In-depth management of the main techniques for fetal reduction in monochorionic gestation
- ♦ Diagnose and manage the prognosis of the different septal defects
- ♦ Make use of ultrasound to diagnose the most important neuronal migration alterations

05

# Course Management

In its commitment to offer a quality update, TECH has carried out a meticulous selection process of each and every one of the teachers that make up this program. Thus, the graduates have the guarantee of access to a syllabus developed by specialists in Gynecology and Obstetrics with extensive professional experience in the sector. In addition, given its proximity, students will have the opportunity to resolve any questions that arise with the content of this program.



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*Get a complete update through an advanced syllabus, developed by the best experts in Gynecology and Obstetrics”*

## Management



### Dr. García-Manau, Pablo

- ♦ Obstetrician and Gynecologist at Hospital Quirón in Barcelona
- ♦ Attending Physician at the Gynecology and Obstetrics Department of the Quirónsalud Hospital in Madrid
- ♦ Specialist in Maternal-Fetal Medicine
- ♦ Specialist in Obstetric Ultrasound and Fetal Echocardiography
- ♦ Member of: Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

## Professors

### Dr. Carmona, Anna

- ♦ Specialist in the Department of Gynecology and Obstetrics at Hospital Mútua Terrassa
- ♦ Specialist in the Pelvic Floor, Transgender Medicine and Adolescent Medicine units at Hospital Mútua Terrassa
- ♦ Professional Master's Degree in Statistics applied to Medical Sciences at the Autonomous University of Barcelona
- ♦ Postgraduate Diploma in the treatment of fibroids with High Intensity Ultrasound, HIFU (Chongqing Haifu)
- ♦ Postgraduate Diploma in Pelvic Floor Ultrasound by the Mútua Terrassa Welfare Foundation

### Dr. Pons, Nuria

- ♦ Specialist in the Department of Gynecology and Obstetrics at Hospital Mútua Terrassa
- ♦ Specialist in Unit of Myomas and Benign Pathology at Hospital Mútua Terrassa
- ♦ Professional Master's Degree in Sexology, University of Barcelona
- ♦ Postgraduate Diploma in the treatment of fibroids with High Intensity Ultrasound, HIFU Chongqing Haifu
- ♦ Member of: Group Job Non Surgical Ablative Therapy of Benign Uterine Disease de la European Society of Gastrointestinal Endoscopy (ESGE)



**Dr. Escribano, Gemma**

- ♦ Specialist in the Department of Gynecology and Obstetrics at Hospital Mútua Terrassa
- ♦ Specialist in the Benign Pathology and Obstetrics Unit at Hospital Mútua Terrassa
- ♦ Coordinator of ASSIR (Sexual and Reproductive Health Care) at Hospital Mútua Terrassa
- ♦ Professional Master's Degree in Minimally Invasive Surgery in Gynecology by TECH Technological University

**Dr. Porta, Oriol**

- ♦ Head of the Obstetrics and Gynecology Department of the Mútua Terrassa University Hospital
- ♦ President of the Catalan Society of Obstetrics and Gynecology
- ♦ PhD in Medicine and Surgery from the Autonomous University of Barcelona
- ♦ Practical Stay in Pelvic Floor and Chronic Pelvic Pain at the National Hospital for Neurology and Neurosurgery in London
- ♦ Senior Management Program in Health Institutions, Business Administration and Management at the IESE Business School and the University of Navarra
- ♦ Member of: Spanish Society of Gynecology and Obstetrics (SEGO), International Pelvic Pain Society (IPPS)

**Dr. Oteros, Beatriz**

- ♦ Specialist in the Department of Gynecology and Obstetrics at Hospital Mútua Terrassa
- ♦ Specialist in Unit of Myomas and Benign Pathology at Hospital Mútua Terrassa
- ♦ Postgraduate Diploma in Pelvic Floor Ultrasound by the Mútua Terrassa Welfare Foundation

**Dr. Prada, Elena**

- ♦ Specialist in Human Reproduction at the Center for Fertility and Human Reproduction CIRH
- ♦ Specialist in Human Reproduction at the University Hospital MútuaTerrassa
- ♦ Professional Master's Degree in Human Nutrition from the University of Barcelona
- ♦ Professional Master's Degree in Human Reproduction from IVI
- ♦ Postgraduate Diploma in Clinical Genetics and Genomics
- ♦ Member of: Spanish Fertility Society (SEF), European Society of Human Reproduction and Embryology (ESRET)

**Dr. Cassadó, Jordi**

- ♦ Care Coordinator of the Obstetrics and Gynecology Service at the University Hospital Mútua Terrassa
- ♦ Vice President of the Pelvic Floor Section of the Spanish Society of Obstetrics and Gynecology (SEGO)
- ♦ Associate Professor of Obstetrics and Gynecology at the University of Barcelona
- ♦ Professor of the International School of Gynecologic Endoscopy (EIDEG)
- ♦ PhD in Medicine and Surgery from the Autonomous University of Barcelona
- ♦ Specialist in Gynecology and Obstetrics

**Dr. Codina, Laura**

- ♦ Specialist in the Obstetrics and Gynecology Department of the Hospital Mútua Terrassa
- ♦ Specialist in Prenatal Diagnosis and Maternal-Fetal Medicine
- ♦ Member of: Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

#### **Dr. López-Quesada, Eva**

- ♦ Coordinator of the Obstetrics and Gynecology Service at the MútuaTerrassa University Hospital
- ♦ Specialist in Prenatal Diagnosis and Maternal-Fetal Medicine
- ♦ PhD from the Autonomous University of Barcelona
- ♦ Postgraduate in Fetal Medicine and in Clinical Genetics and Genomics
- ♦ Member of: Clinical Commission for Quality Control of First Trimester Ultrasound of Catalonia, Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

#### **Dr. Cabello, Eloy**

- ♦ Specialist in the Obstetrics and Gynecology Department of the Hospital Mútua Terrassa
- ♦ Specialist in Prenatal Diagnosis and Maternal-Fetal Medicine
- ♦ Member of the Catalan Society of Obstetrics and Gynecology (SCOG) Catalan Society Spanish Society of Gynecology and Obstetrics (SEGO)

#### **Dr. Mendoza, Manel**

- ♦ Head of the Placental Insufficiency Unit of the Obstetrics Department at Vall d'Hebron University Hospital
- ♦ Specialist in the Obstetrics Service of the Vall d'Hebron University Hospital
- ♦ PhD from the Autonomous University of Barcelona
- ♦ Specialist in Maternal-Fetal Medicine
- ♦ Member of: Member of the Maternal-Fetal Medicine Section of the Catalan Society of Obstetrics and Gynecology (SCOG), the Spanish Society of Gynecology and Obstetrics (SEGO)

#### **Dr. Bonacina, Erika**

- ♦ Head of the Placental Insufficiency Unit of the Obstetrics Department at Vall d'Hebron Hospital
- ♦ Obstetrician and Gynecologist at El Pilar Hospital
- ♦ Specialist in Maternal-Fetal Medicine

#### **Dr. Maiz, Nerea**

- ♦ Research Coordinator of the Obstetrics Service of Vall d'Hebron Hospital
- ♦ Specialist in the Fetal Medicine Unit at Vall d'Hebron Hospital
- ♦ Specialist in Prenatal Diagnosis and Maternal-Fetal Medicine
- ♦ Associate Professor at the Universitat of Vic
- ♦ PhD of Medicine from the University of Barcelona
- ♦ Professional Master's Degree in Research Methodology in Health Sciences, Autonomous University of Barcelona
- ♦ Member of: Spanish Society of Gynaecology and Obstetrics (SEGO)

#### **Dr. Rodó, Carlota**

- ♦ Attending Physician of the Obstetrics Service at the Vall d'Hebron University Hospital
- ♦ Specialist in Prenatal Diagnosis and Fetal Medicine and Maternal-Fetal neurosonography
- ♦ PhD from the Autonomous University of Barcelona
- ♦ Member of the Spanish Association of Prenatal Diagnosis (AEDP) and of the Ultrasound Section of the Catalan Society of Obstetrics and Gynecology (SCOG)
- ♦ Member of: Spanish Society of Gynaecology and Obstetrics (SEGO)

**Dr. Arévalo, Silvia**

- ♦ Head of Obstetrics Service Section of the Vall d'Hebron Hospital
- ♦ Specialist in Prenatal Diagnosis and Fetal Medicine and Maternal-Fetal Echocardiography
- ♦ Member of: Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

**Dr. Vilà Casas, Joan**

- ♦ Specialist in the Obstetric Ultrasound Unit of the Obstetrics Service of the Vall d'Hebron Hospital
- ♦ Specialist in the Obstetrics Service of the Vall d'Hebron Hospital
- ♦ Specialist in Obstetric Ultrasound

**Dr. Aquise, Adriana**

- ♦ Specialist of the Gynecology and Obstetrics Service at the of Torrejón University Hospital
- ♦ Specialist in Obstetrics and Gynecology at Vall d'Hebron Hospital
- ♦ Tutor of clinical practices of the Medicine degree at the Francisco de Vitoria University
- ♦ PhD in Medicine, University of Seville
- ♦ Fellow in Fetal Medicine at the King's College Hospital
- ♦ Specialist in Fetal Medicine and Obstetric Ultrasound by the Fetal Medicine Foundation
- ♦ Member of: Spanish Society of Gynecology and Obstetrics (SEGO), Ultrasound Section of the SEGO (SESEGO)

**Dr. Ferrer, Queralt**

- ♦ Specialist in the Pediatric Cardiology Service at the Vall d'Hebron Hospital
- ♦ Specialist in Pediatric and Fetal Cardiology at the Hospital Universitario Dexeus
- ♦ Specialist in Pediatrics and Pediatric Cardiology
- ♦ Member of: Fetal Cardiology Working Group of the European Society of Pediatric Cardiology, Fetal Cardiology Working Group of the Spanish Society of Pediatric Cardiology

**Dr. Giralt, Gemma**

- ♦ Pediatric Cardiology Service Specialist at the Vall d'Hebron University Hospital
- ♦ Specialist in Pediatrics and Pediatric Cardiology
- ♦ Member of: Spanish Society of Cardiology (SEC), Member of the Imaging Section of the Spanish Society of Pediatric Cardiology and Congenital Heart Disease (SECPCC)

**Dr. Fidalgo Conde, Ana María**

- ♦ Specialist of the Gynecology and Obstetrics Service at the of Torrejón University Hospital
- ♦ Tutor of clinical practices of the Medicine degree at the Francisco de Vitoria University
- ♦ Specialist in Maternal-Fetal Medicine and Obstetric Ultrasonography
- ♦ Fellow in Fetal Medicine at the King's College Hospital. London
- ♦ Member of: Spanish Society of Gynecology and Obstetrics (SEGO), Ultrasound Section of the SEGO (SESEGO)

**Dr. Higuera, Teresa**

- ♦ Head of the Obstetric Ultrasound Unit of the Obstetrics Service at the Vall d'Hebron Hospital
- ♦ Specialist in the Obstetrics Service of the Vall d'Hebron Hospital
- ♦ PhD from the University of Zaragoza
- ♦ Practical stay in Fetal Medicine at the King's College Hospital. London
- ♦ Associate Professor at Autonomous University of Barcelona
- ♦ Member of: Spanish Society of Gynaecology and Obstetrics (SEGO)

**Dr. Maroto, Anna**

- ♦ Chief of Gynecology and Obstetrics Service at the University Hospital Doctor Josep Trueta
- ♦ Specialist in Fetal Medicine
- ♦ Associate Professor at University of Girona
- ♦ Member of the Ultrasound and Fetal Medicine Section of the Catalan Society of Obstetrics and Gynecology (SCOG)
- ♦ PhD from the Autonomous University of Barcelona

**Dr. Martínez, Clara**

- ♦ Chief of Gynecology and Obstetrics Service at the University Hospital Doctor Josep Trueta
- ♦ Specialist in Prenatal Diagnosis
- ♦ Member of: Spanish Obstetric Safety Group

**Dr. Sánchez, María Ángeles**

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- ♦ Specialist in Prenatal Diagnosis and Maternal-Fetal Medicine
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**Dr. Urquizu, Xavier**

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- ♦ PhD from the University of Barcelona
- ♦ Member of: Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

**Dr. Rodríguez Mías, Núria Laia**

- ♦ Attending Physician of the Gynecology Service at the Vall d' Hebron University Hospital
- ♦ Attending Physician of the Gynecology Service at the Medical Center Teknon
- ♦ Gynecologist at UVOGYN
- ♦ Author of numerous publications in high impact scientific journals
- ♦ PhD in Medicine and Surgery from the University of Barcelona
- ♦ Professional Master's Degree in Gynecological Endoscopy

**Dr. Rovira Pampalona, Jennifer**

- ◆ Specialist in Gynecology and Obstetrics
- ◆ Attending Physician of the Gynecology and Obstetrics Service at the Igualada University Hospital
- ◆ Author of scientific articles related to her specialty in national and international journals
- ◆ Lecturer in university postgraduate academic programs
- ◆ PhD in Medicine, Autonomous University of Barcelona
- ◆ Professional Master's Degree in Oncologic Gynecology

**Dr. Balcells, Laura**

- ◆ Specialist in Gynecology and Obstetrics at the MútuaTerrassa University Hospital
- ◆ Specialist in Cervical Pathology
- ◆ Author of scientific publications on Premature Ovarian Failure
- ◆ Member of: Societat Catalana d'Obstetrícia i Ginecologia, Spanish Society of Gynecology and Obstetrics, Spanish Association of Cervical Pathology and Colposcopy

**Dr. Peró, Marta**

- ◆ Specialist in Gynecology and Obstetrics at Hospital de la Santa Creu i de Sant Pau
- ◆ English-speaking gynecologist with a degree in Medicine and Surgery from the Autonomous University of Barcelona
- ◆ Postgraduate Diploma in Gynecological Ultrasound and Pelvic Floor Pathology
- ◆ Researcher in Matrix Study: study of the biological properties of a dermal matrix of human origin for its application in pelvic floor reconstruction surgeries
- ◆ Member of: Societat Catalana d'Obstetrícia i Ginecologia, Spanish Society of Obstetrics and Gynecology and Obstetrics
- ◆ Author of 2 scientific articles

**Dr. Rams Llops, Noelia**

- ◆ Assistant Physician in the Gynecology Department at the Hospital de la Santa Creu i Sant Pau
- ◆ Assistant Physician in the Gynecology Department at the Hospital de la Santa Creu i Sant Pau with special dedication to Gynecological Ultrasound
- ◆ MIR doctor at the Hospital de la Santa Creu i Sant Pau with specialization in Obstetrics and Gynecology
- ◆ Training stays at the University Clinic of Navarra and at the UM Hospital in Cagliari. Italy
- ◆ Degree in Medicine from the University of Barcelona
- ◆ Clinical professor associated with the program service of her specialty
- ◆ Member of: SIEGO, ISUOG
- ◆ Author of several publications and lectures

**Dr. Ros, Cristina**

- ◆ Specialist in Gynecological Ultrasound at Barnaclínic and FIVClínic
- ◆ Specialist in Gynecology at the Clinical and Provincial Hospital of Barcelona
- ◆ PhD in Obstetrics and Gynecology from the University of Barcelona
- ◆ Degree in Medicine and Surgery from the University of Barcelona
- ◆ Author of several scientific researches in the service of her specialty
- ◆ Member of: International Urogynecological Association, International Continence Society, Spanish Society of Gynecology and Obstetrics

**Dr. Delgado Morell, Aina**

- ◆ Assistant Physician in the Gynecology Department at the Hospital de la Santa Creu i Sant Pau
- ◆ Collaborator at the Sant Pau Unit of the Autonomous University of Barcelona
- ◆ Collaborator in clinical research projects on Health, Gender, Biomedical and Gynecological

**Dr. Trilla, Cristina**

- ◆ Specialist in Prenatal Diagnosis at the Santa Creu i Sant Pau Hospital
- ◆ Fertility Specialist at Clínica Fertty. Barcelona
- ◆ PhD in Medicine, Autonomous University of Barcelona
- ◆ Member of: Section of Maternal-Fetal Medicine of the Catalan Society of Obstetrics and Gynecology (SCOG), International Society of Ultrasound in Obstetrics & Gynecology (ISUOG)

**Dr. De Diego Burillo, Raúl**

- ◆ Clinical Chief of the Obstetrics Service at the Germans Trias i Pujol University Hospital. Badalona, Spain
- ◆ Specialist in Obstetrics and Gynecology at the Germans Trias i Pujol University Hospital
- ◆ PhD in Medicine and Surgery from the University of Barcelona
- ◆ Teacher associated with programs in his specialty

**Dr. Parriego Martínez, Vanesa**

- ◆ Specialist in Obstetrics and Gynecology at the Germans Trias i Pujol University Hospital. Badalona, Spain
- ◆ Specialist in Maternal-Fetal Medicine
- ◆ Collaborating Professor of Obstetrics and Gynecology
- ◆ Postgraduate in Maternal-Fetal Medicine and Fetal Medicine R&D

**Dr. Peralta Gallego, Leia**

- ◆ Specialist in Obstetrics and Gynecology at the Germans Trias i Pujol University Hospital. Badalona, Spain
- ◆ Specialist in Maternal-Fetal Medicine
- ◆ Teacher and researcher at the service of her specialty

**Dr. Grau Company, Laia**

- ◆ Specialist in Obstetrics and Gynecology at the Germans Trias i Pujol University Hospital. Badalona, Spain
- ◆ Specialist in Maternal-Fetal Medicine at the University Hospital Germans Trias i Pujol
- ◆ Member of: Fetal Neurology Working Group of the Germans Trias i Pujol University Hospital
- ◆ Training stay in Fetal Medicine at the Center for Maternal, Fetal and Neonatal Medicine of Barcelona, BCNatal
- ◆ Collaborating Professor of Obstetrics and Gynecology

**Dr. Zientalska Fedonczuk, Aneta**

- ◆ Coordinator of the Fetal Medicine Unit of the Obstetrics Department at the Germans Trias i Pujol University Hospital
- ◆ Member of: Fetal Cardiology Working Group at the Germans Trias i Pujol University Hospital, Ultrasound and Fetal Medicine Section of the Academy of Medical Sciences of Catalonia and the Balearic Islands, First Trimester Ultrasound Quality Control Group of the Department of Health of the Generalitat de Catalunya
- ◆ Specialist in Obstetrics and Gynecology at the Germans Trias i Pujol University Hospital

**Dr. Hurtado Lupiañez, Iván**

- ◆ Specialist in Obstetrics and Gynecology at the Germans Trias i Pujol University Hospital. Badalona, Spain
- ◆ Specialist in Maternal-Fetal Medicine in the Fetal Neurology working group at the Germans Trias i Pujol University Hospital
- ◆ Interuniversity Diploma in Fetal Medicine awarded by the Sorbonne Universités at the Pierre and Marie Curie Faculty. Paris
- ◆ Associate Professor in Obstetrics and Gynecology
- ◆ PhD in Pediatrics, Obstetrics and Gynecology from the Autonomous University of Barcelona

**Dr. Lecumberri, Carla**

- ♦ Assistant Physician at the Lecumberri Medical Office
- ♦ Assistant Physician in Gynecology and Obstetrics at Germans Trias i Pujol University Hospital
- ♦ Adjunct Specialist in the Generalitat de Catalunya
- ♦ Degree from the Autonomous University of Barcelona

**Dr. Iglesias, Sara**

- ♦ Specialist Physician at the Germans Trias i Pujol University Hospital
- ♦ Specialist in Gynecology and Obstetrics at the Women's Health Institute Barcelona
- ♦ Adjunct Physician at the General Hospital de L'Hospitalet
- ♦ Lecturer in academic programs in the service of her specialty

**Dr. Mora Hervás, Irene**

- ♦ Attending Physician at Hospital de la Santa Creu i Sant Pau
- ♦ PhD of Medicine from the University of Barcelona
- ♦ Specialist in the Diagnosis and Treatment of Pelvic Floor Pathology through the Application of 2D and 3D Ultrasound
- ♦ Postgraduate Diploma in Pelvic Floor Dysfunction Surgery by Vaginal and Laparoscopic Surgery
- ♦ Specialist in the Management of Benign Gynecological Pathology

**Dr. Oliveres, Carla**

- ♦ Assistant of the Gynecology and Obstetrics Service of the Igualada Hospital
- ♦ Specialist in Gynecology and Obstetrics
- ♦ Degree in Medicine and Surgery from the Autonomous University of Barcelona
- ♦ Professional Master's degree in Minimally Invasive Surgery in Gynecology by CEU
- ♦ Professional Master's Degree in Endometriosis by the CEU

**Dr. Huguet Galofrè, Eva**

- ♦ Assistant in the Gynecology and Obstetrics Service of Hospital Mútua Terrassa in the Pelvic Floor Unit
- ♦ Degree in Medicine and General Surgery from the University of Barcelona
- ♦ Professional Master's Degree in Breast Pathology from the University of Barcelona
- ♦ Member of: Deputy Secretary of the Board of the Catalan Society of Obstetrics and Gynecology (SCOG), Pelvic Floor Section of the Catalan Society of Obstetrics and Gynecology, Pelvic Floor Section of the SEGO

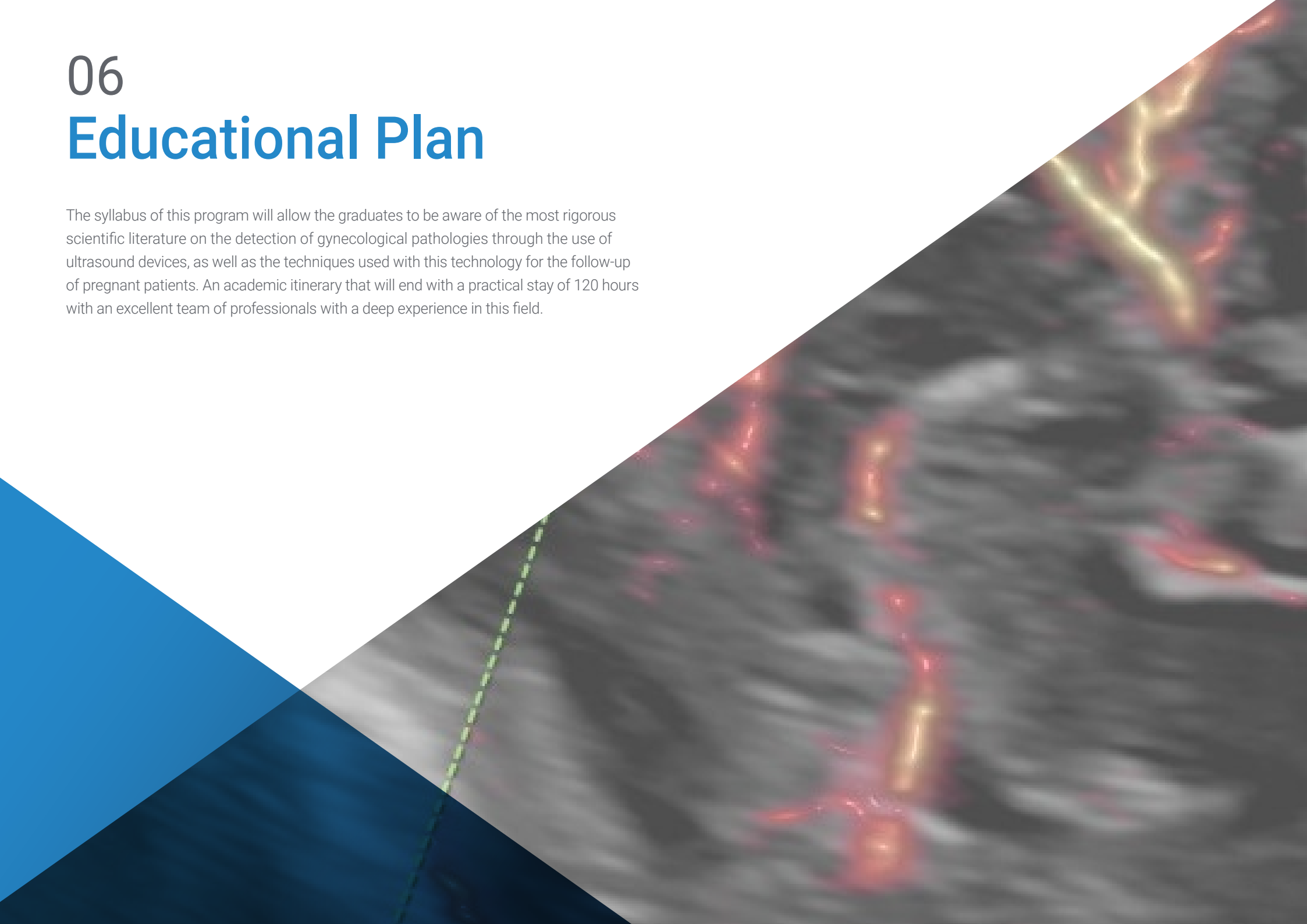


*Great experts in Ultrasound will guide you through the latest updates in this field"*

# 06

## Educational Plan

The syllabus of this program will allow the graduates to be aware of the most rigorous scientific literature on the detection of gynecological pathologies through the use of ultrasound devices, as well as the techniques used with this technology for the follow-up of pregnant patients. An academic itinerary that will end with a practical stay of 120 hours with an excellent team of professionals with a deep experience in this field.





“

*A lot of scientific readings with which you will be able to further extend the information provided in this program”*

### Module 1. Ultrasound. Normal study in gynecology

- 1.1. Normal anatomy in gynecology
  - 1.1.1. Normal anatomy in gynecology
  - 1.1.2. Normal gynecologic ultrasound anatomy: structures and anatomical landmarks to consider
  - 1.1.3. Ultrasound technique: systematics of the exploration
  - 1.1.4. Language and description of normality and pathology in the ultrasound technique
- 1.2. Physical principles of ultrasound. Technical Aspects
  - 1.2.1. Basic Principles of Ultrasound Physics
  - 1.2.2. Creation of the image from ultrasounds
  - 1.2.3. Characteristics of the ultrasound image
  - 1.2.4. Optimization of the gynecological ultrasound
  - 1.2.5. Recognition and correction of artifacts
- 1.3. Types of ultrasound probes in gynecologic ultrasonography
  - 1.3.1. Types of transducers
  - 1.3.2. Advantages and disadvantages of the different probes and approaches
- 1.4. Technical principles of Doppler. Technical Aspects
  - 1.4.1. Physical principles of Doppler
  - 1.4.2. Main indications of Doppler in gynecologic ultrasound examination
  - 1.4.3. Optimization of the Doppler technique
- 1.5. Technical principles of 3D/4D ultrasound. Technical aspects and usefulness
  - 1.5.1. Basic principles of 3-4D ultrasound
  - 1.5.2. Application of the 3-4D technique in gynecology
  - 1.5.3. Systematics of the technique by structures: volume acquisition
  - 1.5.4. Navigation, reconstruction and rendering of the ultrasound volume
  - 1.5.5. Optimization of the reconstruction: default modes
  - 1.5.6. Principles of multiplanar reconstruction or TUI
- 1.6. Use of ultrasound in gynecologic and obstetric emergencies
  - 1.6.1. Applicability of ultrasound in gynecologic and obstetric emergencies
  - 1.6.2. Systematic use of ultrasound technique in gynecological emergencies
  - 1.6.3. Ultrasound in the differential diagnosis of acute abdomen
  - 1.6.4. Ultrasound in the differential diagnosis of metrorrhagias
  - 1.6.5. Ultrasound report in urgent gynecologic pathology
  - 1.6.6. Limitations of ultrasonography: complementary techniques to be requested

- 1.7. Management of offline volumes
  - 1.7.1. Presentation of different software
  - 1.7.2. Volume storage
  - 1.7.3. Recovery of volumes in the offline software
  - 1.7.4. Two-dimensional plane navigation and optimization
  - 1.7.5. 2D plane navigation: in time and space
  - 1.7.6. Three-dimensional reconstruction
  - 1.7.7. Optimization of the three-dimensional image
- 1.8. Complementary Techniques: Sonohysterography / hysterosonosalingography
  - 1.8.1. Basic principles of exploration
  - 1.8.2. Systematic of the technique
  - 1.8.3. Hysterosonography: technique, interpretation of the image and preparation of the report
  - 1.8.4. Hysterosonosalingography: technique, interpretation of the image and preparation of the report
- 1.9. Lines of research in gynecologic ultrasonography
  - 1.9.1. Status of artificial intelligence applied to gynecologic ultrasound
  - 1.9.2. The current and future role of ultrasound in the evaluation of the gynecologic oncologic patient
  - 1.9.3. Elastography in gynecology
  - 1.9.4. Ultrasound in the diagnosis and management of severe genital atrophy and genitourinary syndrome

### Module 2. Pathology of the endometrium, myometrium and cervix

- 2.1. Ultrasound in benign endometrial pathology
  - 2.1.1. Endometrial ultrasound normality: qualitative and quantitative assessment
  - 2.1.2. Ultrasonography, endometrium and variation with the menstrual cycle
  - 2.1.3. Three-dimensional technique in endometrial assessment
  - 2.1.4. Description and terminology according to IETA group
  - 2.1.5. Ultrasound in the assessment of endometrial hyperplasia
  - 2.1.6. Ultrasound in the assessment of endometrial polyps

- 2.2. Ultrasonography of malignant endometrial pathology
  - 2.2.1. Introduction: Endometrial Cancer
  - 2.2.2. Ultrasound characteristics of endometrial cancer
  - 2.2.3. Systematic local assessment of endometrial cancer
  - 2.2.4. Systematic assessment of extraendometrial disease
  - 2.2.5. Ultrasound in the assessment of recurrence of endometrial cancer
- 2.3. Gynecological ultrasound after abortion: Retention of conception debris / Sd. Asherman's syndrome
  - 2.3.1. Endometrial ultrasound normality after complete miscarriage
  - 2.3.2. Ultrasound in the diagnosis and follow up of the remnants of conception
  - 2.3.3. Ultrasound in the assessment and follow-up of uterine synechiae
- 2.4. Ultrasound in the diagnostic study of fibroids
  - 2.4.1. Definition and general aspects of myomas
  - 2.4.2. Types of fibroids: classifications and implications
  - 2.4.3. Description and ultrasound classification
  - 2.4.4. Types of myoma degeneration
  - 2.4.5. Ultrasound Characteristics: Doppler technique and three-dimensional reconstruction
  - 2.4.6. Ultrasound monitoring of the patient with uterine myomatosis
  - 2.4.7. Differential diagnosis, limitations of the technique and complementary explorations
- 2.5. Ultrasound in the therapeutic approach to myomas
  - 2.5.1. Ultrasound in the treatment of myomas with radiofrequency
  - 2.5.2. Ultrasound in the treatment of fibroids with high-frequency ultrasound (HIFU)
- 2.6. Ultrasonography in the assessment of malignant myometrial pathology
  - 2.6.1. General information on malignant myometrial tumors
  - 2.6.2. Ultrasound differential diagnosis of uterine sarcomas
  - 2.6.3. Limitation of ultrasonography in the diagnosis of uterine sarcomas complementary tests
- 2.7. Adenomyosis
  - 2.7.1. Basic concepts about adenomyosis
  - 2.7.2. Ultrasound characteristics of the normal myometrium
  - 2.7.3. Ultrasonographic characteristics of adenomyosis using the MUSA system
  - 2.7.4. Report of the ultrasound description of the findings in the clinical report
  - 2.7.5. Correlation of the pathological anatomy with the ultrasound assessment of the myometrial-endometrial junction
  - 2.7.6. Limitations of ultrasound and complementary tests in the diagnosis and follow-up of adenomyosis
- 2.8. Ultrasound study in the evaluation of the cervix
  - 2.8.1. Ultrasound anatomy of the normal cervix
  - 2.8.2. Ultrasound characteristics and description of cervical tumors
  - 2.8.3. Role of ultrasonography in the initial staging of cervical cancer
  - 2.8.4. Role of ultrasonography in extracervical disease in cervical cancer
  - 2.8.5. Ultrasonography in the follow-up of the patient with cervical cancer: evaluation of treatment and assessment of recurrences
- 2.9. Ultrasound study in the assessment of the vagina and vulva
  - 2.9.1. Current evidence for ultrasound assessment of the vagina and vulva
  - 2.9.2. Ultrasound applications
  - 2.9.3. Systematic technique and findings
- 2.10. Ultrasound study in pediatric age
  - 2.10.1. Introduction to the most frequent pediatric pathology
  - 2.10.2. Normal ultrasound in the pediatric and adolescent patient
  - 2.10.3. Recommended routes of approach: advantages and disadvantages
  - 2.10.4. Ultrasound of precocious puberty
  - 2.10.5. Ultrasonographic findings in intersexuality
  - 2.10.6. Hematocolpos secondary to imperforate hymen

### Module 3. Ovarian Pathology, Endometriosis and Pain


- 3.1. Ultrasonography in the assessment of benign ovarian pathology
  - 3.1.1. Normal ovarian ultrasound anatomy
  - 3.1.2. Generalities and classifications of benign ovarian pathologies
  - 3.1.3. Systematic in the evaluation and ultrasound description of annexial pathology: ultrasound criteria of benignity
  - 3.1.4. Types of tumors and ultrasound characteristics
  - 3.1.5. Ovarian torsion: sonographic findings

- 3.2. Ultrasonography in the assessment of malignant ovarian pathology
  - 3.2.1. Introduction and generalities malignant ovarian lesions
  - 3.2.2. Classification and ultrasound systematics according to IOTA
  - 3.2.3. Types of tumors and ultrasound characteristics
  - 3.2.4. Ultrasonography in regional and distant staging of ovarian neoplasms
  - 3.2.5. Limitations of ultrasound and complementary tests
  - 3.2.6. Ultrasound in the follow-up and recurrence of patients with a history of ovarian neoplasia
  - 3.2.7. Borderline tumors and ultrasound
- 3.3. Ultrasound study of tubal pathology
  - 3.3.1. Ultrasound of normal tubes
  - 3.3.2. Ultrasound findings in patients with hydrosalpinx
  - 3.3.3. Ultrasonographic findings in patients with pelvic inflammatory disease
  - 3.3.4. Malignant tubular pathology
- 3.4. Ultrasonography in the assessment of pelvic congestion syndrome
  - 3.4.1. Definition, diagnosis and therapeutic approach
  - 3.4.2. Ultrasound findings in patients with pelvic congestion syndrome
  - 3.4.3. Complementary imaging tests
- 3.5. Ultrasonography in the diagnosis of ovarian endometriosis
  - 3.5.1. Definition, repercussions and diagnosis
  - 3.5.2. Systematic of the ultrasound technique
  - 3.5.3. Ultrasound findings in patients with Ovarian Endometriosis
  - 3.5.4. Differential Diagnosis and Complementary Tests
- 3.6. Ultrasonography in the diagnosis of extraovarian endometriosis
  - 3.6.1. Definition, repercussions and diagnosis
  - 3.6.2. Systematic of the ultrasound technique
  - 3.6.3. Ultrasound assessment of the pelvis by structures and compartments
  - 3.6.4. Assessment of extrapelvic implants: umbilical implants, trocar or on cesarean scars
  - 3.6.5. Complementary imaging tests

- 3.7. Ultrasound in the patient with chronic pain in gynecology
  - 3.7.1. Introduction and generalities
  - 3.7.2. Ultrasound findings in gynecologic patients with chronic pain
  - 3.7.3. Ultrasound in the local treatment of gynecologic patients with chronic pain
- 3.8. Ultrasound in breast pathology
  - 3.8.1. Breast ultrasound anatomy
  - 3.8.2. Systematics of the technique and probes
  - 3.8.3. Ultrasonography in the assessment of benign breast pathology
  - 3.8.4. Ultrasonography in the assessment of malignant breast pathology
- 3.9. Interventional ultrasound
  - 3.9.1. Definition
  - 3.9.2. Applications of interventional ultrasound in gynecology
  - 3.9.3. Paracentesis technique
  - 3.9.4. Technique of ultrasound-guided drainage of tuboovarian abscesses
  - 3.9.5. Technique of alcoholization of endometriomas
  - 3.9.6. Breast abscess drainage technique

## Module 4. Reproduction and pelvic floor

- 4.1. Ultrasound in the diagnosis of infertility
  - 4.1.1. Antral follicle count
  - 4.1.2. Screening for tubal pathology
  - 4.1.3. Endometrial pathology screening
- 4.2. Uterine Malformations
  - 4.2.1. Classification of uterine malformations
  - 4.2.2. Differential Diagnosis
  - 4.2.3. T-shaped uterus
- 4.3. 3D ultrasound in reproduction
  - 4.3.1. Introduction
  - 4.3.2. 3D ultrasound of the ovary
  - 4.3.3. 3D ultrasound of the uterus

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- 4.4. Ultrasound in the treatment of reproduction
    - 4.4.1. Ultrasonography in controlled ovarian stimulation for IVF
    - 4.4.2. Ultrasonography for embryo transfer
    - 4.4.3. Ultrasonography in programmed coitus
    - 4.4.4. Ultrasonography in artificial insemination
  - 4.5. Ultrasound anatomy of the pelvic floor
    - 4.5.1. Normal ultrasound anatomy of the pelvic floor
    - 4.5.2. Probes and approach routes: pros and cons of each one of them
    - 4.5.3. Ultrasound Technique: How to obtain the two-dimensional reference plane
    - 4.5.4. Dynamic Ultrasound: Rest, retention and Valsalva in the different structures of the pelvic floor
    - 4.5.5. Improvement of the technique: to the conquest of an excellent image avoiding artifacts
    - 4.5.6. Three-dimensional acquisition technique of the urogenital hiatus for the assessment of the levator pellucidis muscle
    - 4.5.7. Volume storage and offline management
  - 4.6. The role of ultrasound in the assessment of genital prolapse
    - 4.6.1. Normal position of the pelvic organs: normal two-dimensional ultrasound plan
    - 4.6.2. Assessment of the anterior compartment: technique and considerations
    - 4.6.3. Assessment of the mid-technical compartment and considerations
    - 4.6.4. Assessment of the posterior compartment: technique and considerations
    - 4.6.5. Ultrasound findings and therapeutic implications
  - 4.7. The role of ultrasound in the assessment of urinary incontinence
    - 4.7.1. Ultrasound recognition of the anatomical structures involved in continence
    - 4.7.2. Assessment of postvoid residual and its implications
    - 4.7.3. Assessment of urethral slippage and implications
    - 4.7.4. Ultrasound in the diagnosis of stress urinary incontinence
    - 4.7.5. Ultrasound in the diagnosis of urgency urinary incontinence
  - 4.8. The role of ultrasound in the assessment of obstetric trauma
    - 4.8.1. Transperineal ultrasound technique in the assessment of the anal sphincter
    - 4.8.2. Intravaginal ultrasound technique in the assessment of the anal sphincter

- 4.9. Usefulness of ultrasound in the post-surgical control of pelvic floor surge
  - 4.9.1. Ultrasound characteristics of meshes in pelvic floor surgeries
  - 4.9.2. Ultrasonography in the post-surgical follow-up of incontinence meshes
  - 4.9.3. Ultrasound in the post-surgical follow-up of prolapse meshes

## Module 5. First Trimester Ultrasound

- 5.1. Protocol for the study of first trimester ultrasound, normalcy
  - 5.1.1. Gestational age and dating
  - 5.1.2. Anatomic examination
  - 5.1.3. Measurement of markers of aneuploidy
  - 5.1.4. Placenta, uterus and adnexa
- 5.2. Uncertain Location Pregnancy
  - 5.2.1. Differential Diagnosis
  - 5.2.2. Blood Biochemistry
  - 5.2.3. Action Protocol
- 5.3. Early gestation (trophoblastic disease, amnios, vesicles, etc.)
  - 5.3.1. Gestational sac
  - 5.3.2. Yolk vesicle
  - 5.3.3. Amniotic and chorionic cavity
  - 5.3.4. Embryo
  - 5.3.5. Early embryonic development
  - 5.3.6. Early pathology
  - 5.3.7. Findings of poor gestational prognosis
- 5.4. Ultrasound markers of first trimester chromosomopathy
  - 5.4.1. Introduction
  - 5.4.2. Nuchal translucency
  - 5.4.3. Nasal bone
  - 5.4.4. Venous ductus
  - 5.4.5. Tricuspid Regurgitation
- 5.5. Other first trimester ultrasound markers (angulopathy, trans intracranial, uterine, etc.)
  - 5.5.1. Intracranial translucency
  - 5.5.2. Frontomaxillary angle
  - 5.5.3. Retronasal triangle
  - 5.5.4. Uterine arteries
- 5.6. Diagnosable morphologic pathology in the first trimester
  - 5.6.1. Cranial and central nervous system pathology
  - 5.6.2. Face
  - 5.6.3. Skeletal System
  - 5.6.4. Thorax and neck
  - 5.6.5. Heart
  - 5.6.6. Abdomen
  - 5.6.7. Urinary System
- 5.7. First trimester aneuploidy screening
  - 5.7.1. History of aneuploidy screening
  - 5.7.2. Blood Biochemistry
  - 5.7.3. Ultrasound markers
  - 5.7.4. Study Protocol
- 5.8. Fetal DNA in maternal blood (also in twins)
  - 5.8.1. History of fetal DNA
  - 5.8.2. Methods of Analysis
  - 5.8.3. Practical Aspects
  - 5.8.4. Fetal fraction and absence of result
  - 5.8.5. Fetal DNA in twins
  - 5.8.6. Microdeletions
  - 5.8.7. Interpretation of results and protocol
- 5.9. First trimester preeclampsia screening
  - 5.9.1. History of preeclampsia screening
  - 5.9.2. Types of screening
  - 5.9.3. Components of screening
  - 5.9.4. Available calculators
  - 5.9.5. Cut-off points and prevention
  - 5.9.6. Follow-up in high risk of preeclampsia

- 5.10. Invasive Techniques
  - 5.10.1. Amniocentesis
  - 5.10.2. Chorion Biopsy
  - 5.10.3. Multiple Gestation
- 5.11. Basic genetics in obstetrics
  - 5.11.1. Genetic Concepts
  - 5.11.2. Mendelian Genetics
  - 5.11.3. Non-Mendelian genetics
  - 5.11.4. Prenatal genetic testing

## Module 6. Second Trimester Ultrasound

- 6.1. Protocol for the study of second trimester ultrasound, normality
  - 6.1.1. Gestational age and second trimester dating
  - 6.1.2. Skull and central nervous system
  - 6.1.3. Limbs and spine
  - 6.1.4. Thorax and heart
  - 6.1.5. Abdomen
  - 6.1.6. Genitourinary system
- 6.2. Assessment of the placenta and umbilical cord
  - 6.2.1. Abnormalities of placental shape, location and insertion
  - 6.2.2. Placental tumors
  - 6.2.3. Vascular anomalies and hematomas
  - 6.2.4. Abnormalities of the cord
- 6.3. Spectrum of placenta accreta
  - 6.3.1. Classification
  - 6.3.2. Ultrasound Diagnosis
  - 6.3.3. Magnetic Resonance
  - 6.3.4. Management
- 6.4. Cervical assessment. Risk of Premature Delivery
  - 6.4.1. Measurement Techniques
  - 6.4.2. Risk of Premature Delivery
  - 6.4.3. Recommendations of scientific societies
- 6.5. Ultrasound markers of second trimester chromosomopathy
  - 6.5.1. History of second trimester markers
  - 6.5.2. *Likelihood ratio*
  - 6.5.3. Ultrasound markers
  - 6.5.4. Management
- 6.6. Malformations of the abdomen and abdominal wall
  - 6.6.1. Umbilical Hernia
  - 6.6.2. Omphalocele
  - 6.6.3. Gastroschisis
  - 6.6.4. Bladder exstrophy
  - 6.6.5. Other abdominal wall anomalies
  - 6.6.6. Abdominal cysts
  - 6.6.7. Gastrointestinal Pathology
- 6.7. Malformations of the face, neck and thorax
  - 6.7.1. Facial malformations
  - 6.7.2. Malformations of the neck
  - 6.7.3. Thoracic Malformations
- 6.8. Spinal malformations
  - 6.8.1. Hemivertebra
  - 6.8.2. Neural Tube Defects
  - 6.8.3. Sacrococcygeal Teratomas
  - 6.8.4. Flow regression sequence
- 6.9. Limb malformations
  - 6.9.1. Skeletal Dysplasias
  - 6.9.2. Clubfoot
  - 6.9.3. Reductional alterations
  - 6.9.4. Arthrogryposis

- 6.10. Genitourinary malformations
  - 6.10.1. Renal agenesis
  - 6.10.2. Obstructive Pathology
  - 6.10.3. Renal ectopias
  - 6.10.4. Multicystic and polycystic kidney
  - 6.10.5. Other renal anomalies
  - 6.10.6. Adrenal abnormalities
  - 6.10.7. Bladder anomalies
  - 6.10.8. Genital abnormalities
- 6.11. Fetal Hydrops
  - 6.11.1. Definition
  - 6.11.2. Ultrasound abnormalities
  - 6.11.3. Etiology
  - 6.11.4. Management
  - 6.11.5. Prognosis
  - 6.11.6. Associated Complications
  - 6.11.7. Recurrence

## Module 7. Third Trimester Ultrasound

- 7.1. Protocol for the study of third trimester ultrasound, normality
  - 7.1.1. Gestational age and third trimester dating
  - 7.1.2. Objectives of third trimester ultrasound
  - 7.1.3. Ultrasound systematics
- 7.2. Diagnostic malformation pathology in the third trimester
  - 7.2.1. Introduction
  - 7.2.2. Most frequent malformations
- 7.3. Estimation of fetal growth
  - 7.3.1. Definitions
  - 7.3.2. Estimation of fetal weight. Bio-Meters
  - 7.3.3. Normality curves and percentiles

- 7.4. Doppler study in third trimester ultrasound
  - 7.4.1. Umbilical Artery
  - 7.4.2. Middle Brain Artery
  - 7.4.3. Venous ductus
  - 7.4.4. Uterine arteries
  - 7.4.5. Others
- 7.5. Growth disturbances (PEG and CIR)
  - 7.5.1. Introduction
  - 7.5.2. Small for gestational age fetus
  - 7.5.3. Intrauterine growth retardation
- 7.6. Hemodynamics and fetal impairment in intrauterine growth retardation
  - 7.6.1. Fetal hemodynamics
  - 7.6.2. Biophysical Profile
  - 7.6.3. Fetal Monitoring
- 7.7. Fetal Macrosomia
  - 7.7.1. Introduction
  - 7.7.2. Risk Factors
  - 7.7.3. Diagnosis
  - 7.7.4. Complications
  - 7.7.5. Management
- 7.8. Intrapartum ultrasound
  - 7.8.1. Technique
  - 7.8.2. Station evaluation
  - 7.8.3. Head attitude evaluation
  - 7.8.4. Indications
- 7.9. Abnormalities of amniotic fluid
  - 7.9.1. Introduction
  - 7.9.2. Oligohydramnios
  - 7.9.3. Polyhydramnios
  - 7.9.4. Management



## Module 8. Multiple Gestation

- 8.1. Introduction and embryology
  - 8.1.1. Introduction
  - 8.1.2. Embryology
  - 8.1.3. Classification
- 8.2. Ultrasound Diagnosis Screening for aneuploidy in multiple pregnancies
  - 8.2.1. Introduction
  - 8.2.2. Ultrasound Diagnosis
  - 8.2.3. Dating
  - 8.2.4. First trimester aneuploidy screening
- 8.3. Two-chorionic twin gestation
  - 8.3.1. Introduction
  - 8.3.2. Follow-up of normoevolutionary two-chorionic gestation
  - 8.3.3. Termination of normoevolutionary bicurial gestation
- 8.4. Normal monochorionic twin gestation
  - 8.4.1. Introduction
  - 8.4.2. Follow-up of nomoevolutionary monochorionic pregnancy
  - 8.4.3. Termination of normoevolutionary monochorionic gestation
- 8.5. Complicated monochorionic gestation (TAPS, TRAP, TFF)
  - 8.5.1. TAPS
  - 8.5.2. TRAP
  - 8.5.3. TFF
  - 8.5.4. Discordant structural malformation
- 8.6. Growth retardation in twin gestation (monochorionic and bicorionic)
  - 8.6.1. Introduction
  - 8.6.2. Delayed growth in two-chorionic gestation
  - 8.6.3. Growth retardation in monochorionic gestation

- 8.7. Prevention and screening for preeclampsia
  - 8.7.1. Introduction
  - 8.7.2. First trimester preeclampsia screening
  - 8.7.3. Prevention of preeclampsia in twin gestations
- 8.8. Screening for preterm delivery in twin gestation
  - 8.8.1. Introduction
  - 8.8.2. Cervical assessment, evidence
  - 8.8.3. Prevention of Prematurity
- 8.9. Fetal reduction in twin gestation
  - 8.9.1. Fetal reduction in monochorionic gestation
  - 8.9.2. Risks of fetal reduction
- 8.10. Fetal abortion in twin gestation
  - 8.10.1. Introduction
  - 8.10.2. Fetal abortion in two-chorionic gestation
  - 8.10.3. Fetal death in monochorionic gestation

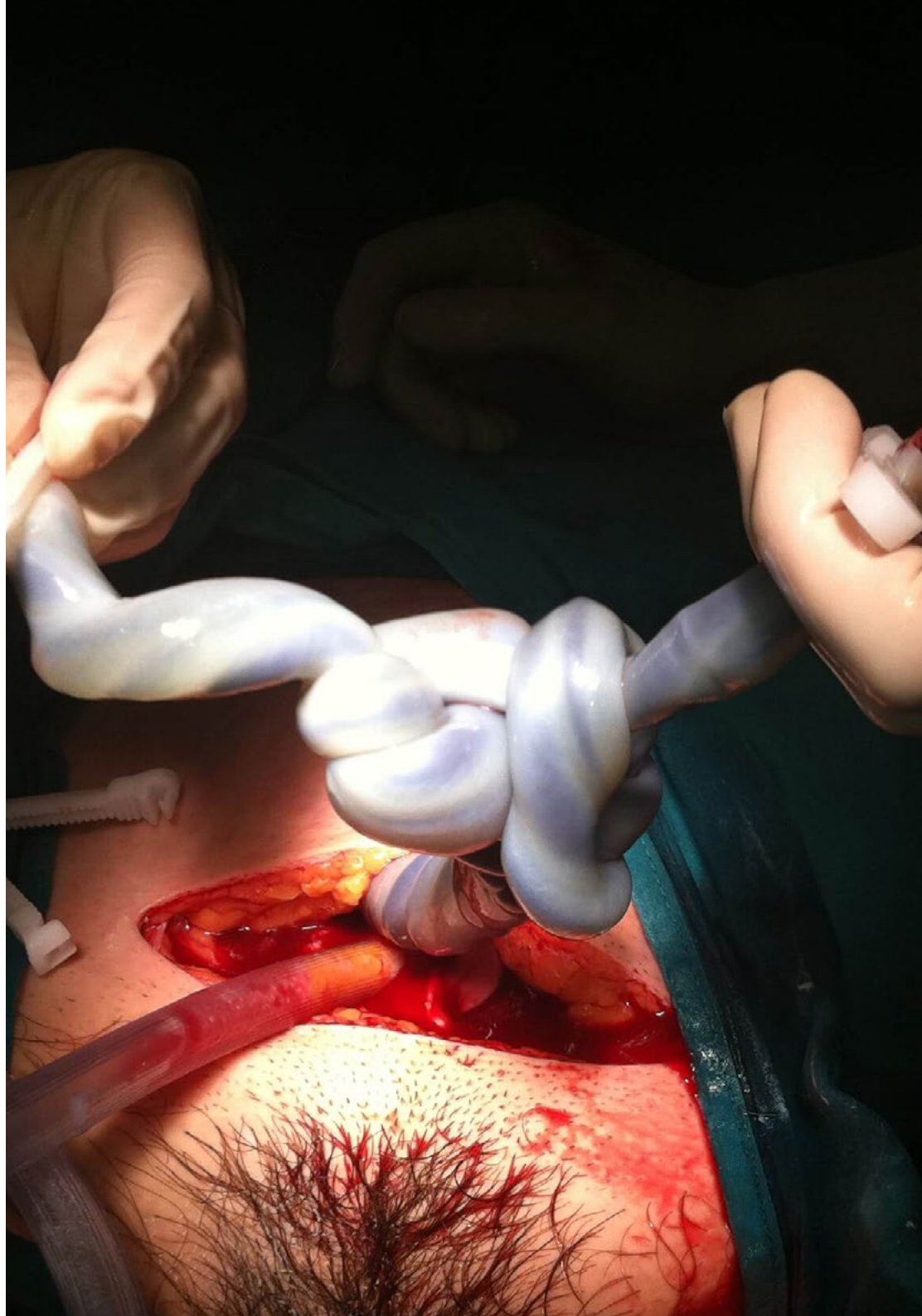
## Module 9. Fetal Echocardiography

- 9.1. Normal Fetal Echocardiography
  - 9.1.1. Indications for Fetal Echocardiography
  - 9.1.2. Fetal Echocardiography Technique
  - 9.1.3. Measurement of Cardiac Structures. Z-score
- 9.2. Cardiac Functional Study Normality
  - 9.2.1. Pathophysiology of Cardiac Dysfunction
  - 9.2.2. Functional Echocardiography Technique
  - 9.2.3. Advanced Techniques
- 9.3. Septal Defects
  - 9.3.1. Atrial Septal Defects
  - 9.3.2. Defects of the Interventricular Septum
  - 9.3.3. Atrioventricular Septal Defects
  - 9.3.4. Double Inlet Single Ventricle

- 9.4. Right Heart Defects
  - 9.4.1. Tricuspid Pathology
  - 9.4.2. Pulmonary Stenosis
  - 9.4.3. Complete Septal Pulmonary Atresia
- 9.5. Left Heart Defects
  - 9.5.1. Mitral Pathology
  - 9.5.2. Aortic Stenosis
  - 9.5.3. Aortic Coarctation
  - 9.5.4. Interrupted Aortic Arch
- 9.6. Conotruncal Anomalies
  - 9.6.1. Tetralogy of Fallot
  - 9.6.2. Main Artery Transposition
  - 9.6.3. Double Outlet Right Ventricle
  - 9.6.4. Truncus Arteriosus
- 9.7. Venous Return Abnormalities
  - 9.7.1. Superior Vena Cava Abnormalities
  - 9.7.2. Inferior Vena Cava Filter Abnormalities
  - 9.7.3. Persistence of the Right Umbilical Vein
  - 9.7.4. Venous Ductus Venosus Agenesis
- 9.8. Abnormalities of Cardiac and Situs Position
  - 9.8.1. Situs Abnormalities
  - 9.8.2. Heterotaxy Syndromes
- 9.9. Cardiac Rhythm Abnormalities
  - 9.9.1. Irregular Rhythms
  - 9.9.2. Bradycardias
  - 9.9.3. Tachycardias

## Module 10. Fetal neurosonography

- 10.1. Fetal neurosonography. Normality
  - 10.1.1. Indications for fetal neurosonography
  - 10.1.2. Technique of fetal neurosonography
  - 10.1.3. Measurement of Brain Structures



- 10.2. Alterations of the Head Circumference and the Skull
  - 10.2.1. Microcephaly
  - 10.2.2. Macrocephaly
  - 10.2.3. Encephalocele
  - 10.2.4. Other Alterations
- 10.3. Ventriculomegaly
  - 10.3.1. Ultrasound Diagnosis
  - 10.3.2. Etiology
  - 10.3.3. Associated Anomalies and Study
  - 10.3.4. Prognosis
  - 10.3.5. Recurrence
- 10.4. Midline Anomalies
  - 10.4.1. Corpus Callosum Anomalies
  - 10.4.2. Absence of cavum septi pellucidi
  - 10.4.3. Holoprosencephaly
- 10.5. Posterior Fossa Anomalies
  - 10.5.1. Dandy Walker Malformation
  - 10.5.2. Megacisterna Magna
  - 10.5.3. Blake's Cyst
  - 10.5.4. Vermis Hypoplasia
  - 10.5.5. Other Anomalies
- 10.6. Cystic Pathology of the Central Nervous System
  - 10.6.1. Choroid Plexus Cyst
  - 10.6.2. Connatal Cyst
  - 10.6.3. Arachnoid Cyst
  - 10.6.4. Other Alterations
- 10.7. Ischemic/Hemorrhagic Pathology of the Central Nervous System
  - 10.7.1. Porencephaly
  - 10.7.2. Schizencephaly
  - 10.7.3. Other Ischemic and Hemorrhagic Injuries
- 10.8. Tumors of the Central Nervous System and Vascular Anomalies
  - 10.8.1. Teratoma
  - 10.8.2. Tuberous Sclerosis
  - 10.8.3. Aneurysm of Galen's Vein
  - 10.8.4. Thrombosis of Dural Venous Sinuses
- 10.9. Sulcation Anomalies
  - 10.9.1. Introduction
  - 10.9.2. Lissencephaly
  - 10.9.3. Hemimegalencephaly
- 10.10. Magnetic Resonance Imaging in the Study of the Central Nervous System
  - 10.10.1. Introduction
  - 10.10.2. Indications
  - 10.10.3. Adequate Gestational Age for Fetal MRI
  - 10.10.4. Utility of fetal MRI in the study of the nervous system



*You have a library of learning resources available 24 hours a day, 7 days a week*

07

# Clinical Internship

This program includes a practical phase, once the graduates have completed the theoretical framework. Throughout 3 intensive weeks, they will be able to verify in situ, the procedures and methodologies used by great experts in the field of Ultrasound applied to the obstetric and gynecological area. A process where students will not be alone, since they will be tutored by a specialist with experience in this field.



“

*Make your practical stay in a hospital center that is at the forefront in the field of obstetrics and gynecology”*

The professionals who take this practical phase will be for 3 weeks, from Monday to Friday with 8 consecutive hours in a first level health environment. In this scenario and together with an expert in the field of Gynecology and Obstetrics, they will have the opportunity to increase their skills in the performance of ultrasound, as well as the detection of pathologies, present in real patients, by means of this device

In this way, from the first moment, they will be involved in activities aimed at perfecting their skills in this area. To do so, they will use the most cutting-edge equipment and will test the methodology used by experts with extensive experience in this field, who base their practice on the latest clinical evidence

TECH thus converts a leading clinical center in this specialty into the best environment for updating knowledge with a completely practical vision adapted to the present needs of specialists. It is undoubtedly an unparalleled experience that this digital university makes available to professionals in the health sector

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



The procedures described below will form the basis of the practical part of the training, and their implementation 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:

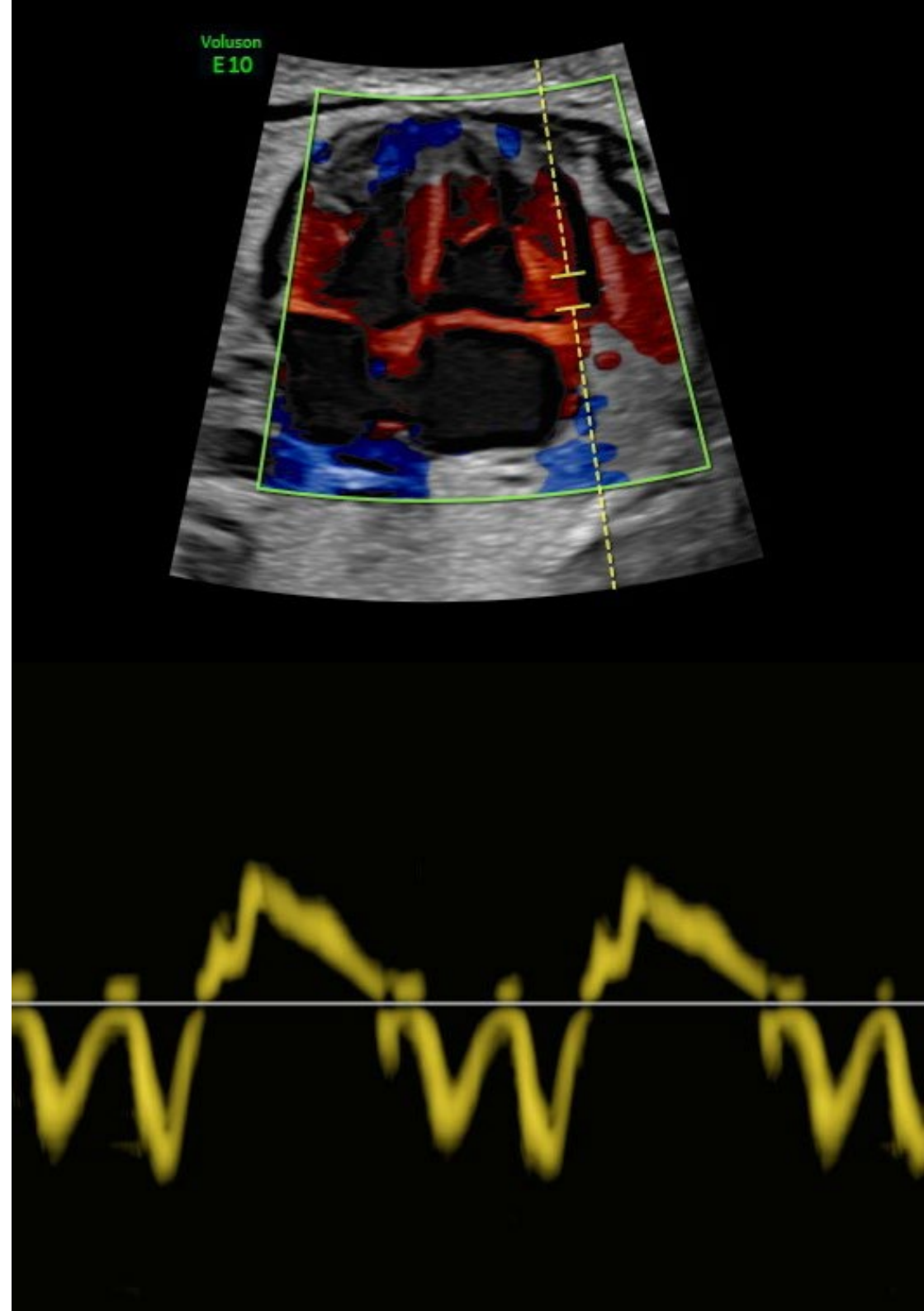
Module	Practical Activity
<b>Ultrasound Techniques</b>	Participate in the performance of routine obstetrical ultrasounds, learning to identify and measure fetal structures
	Use the Doppler ultrasound technique to assess blood flow in maternal and fetal blood vessels
	Perform internal gynecologic scans to evaluate the uterus, ovaries, and adjacent structures
	Perform real-time (4D) ultrasound scans, which allow moving visualization of the fetus
<b>Fetal Echocardiography Study</b>	Identify fetal cardiac structures
	Evaluate fetal cardiac function
	Detect congenital cardiac anomalies using the latest ultrasound technology congenital cardiac anomalies
	Collaborate in the performance of cardiac measurements
<b>Study of gynecological pathologies</b>	Evaluate uterine anomalies, such as uterine fibroids, endometrial polyps or uterine malformations, by means of high-resolution transvaginal ultrasound
	Collaborate in the use of Doppler ultrasound to evaluate ovarian disorders
	Participate in the study and identification of pelvic inflammatory disease
	Interpret ultrasound findings and their clinical correlation in the evaluation of endometriosis
<b>Fetal neurosonography study</b>	Evaluate fetal brain structures by neurosonography
	Participate in the evaluation procedure of fetal cerebral blood flow using the Doppler technique
	Acquire skills to detect and diagnose possible brain abnormalities in the fetus
	Support reporting and effective communication of neurosonographic findings to parents and the medical team

## 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 internship 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. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship 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 Hybrid Professional Master's Degree, 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's Degree will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** The Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

**6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. 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?

This Hybrid Professional Master's Degree includes in its itinerary a practical stay in a clinical center noted for its area of Gynecology and Obstetrics, where they incorporate the latest technological advances and the most distinguished professionals in this field. In this way, TECH opens a range of possibilities for doctors who wish to carry out an updating process in different geographical locations and always surrounded by great experts






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*Complete your updating process in a hospital center of great prestige in the field of Obstetric and Gynecological Ultrasound”*

## tech 52 | Where Can I Do the Clinical Internship?



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



Medicine

### Clínica Mencía

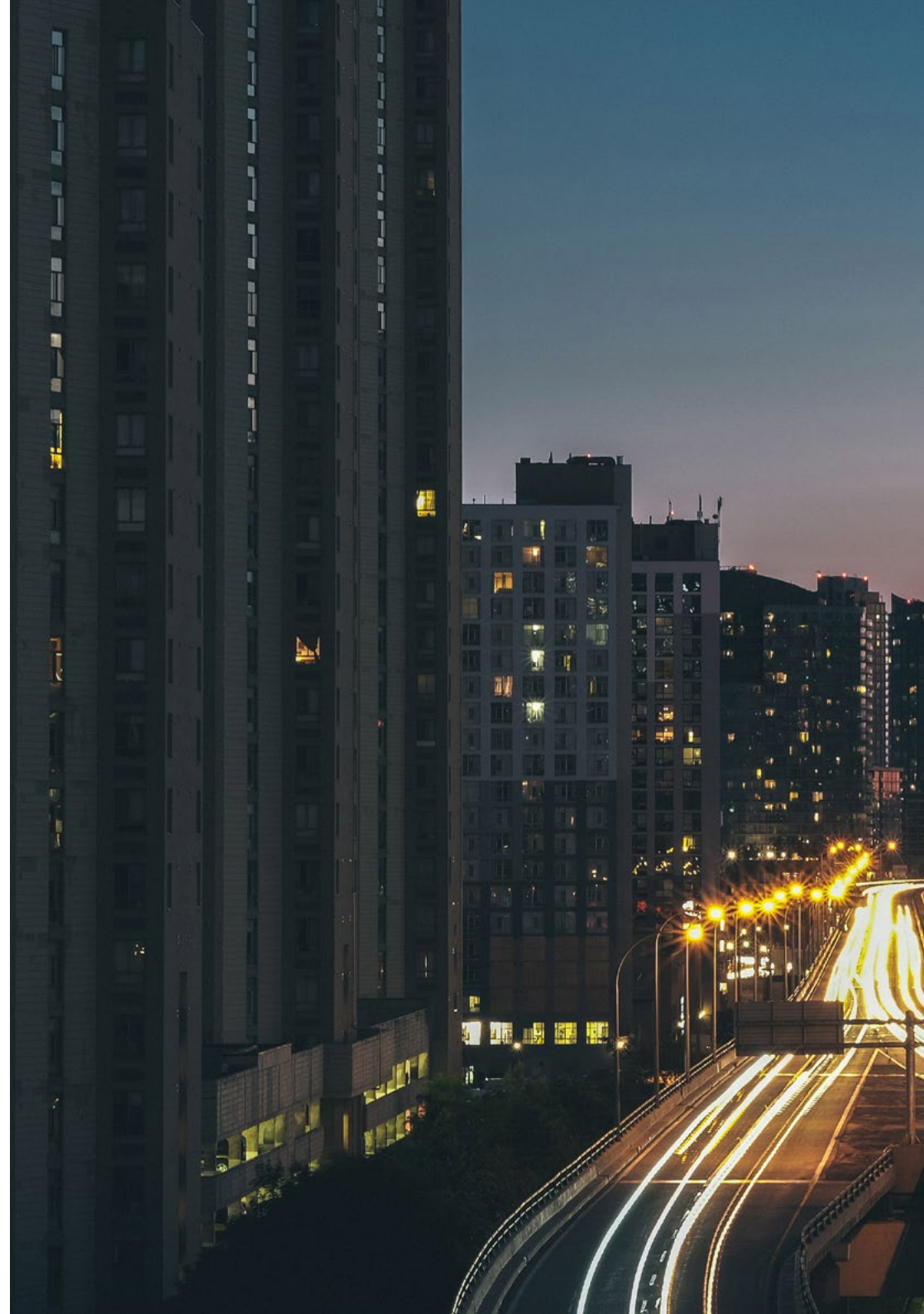
Country	City
Spain	Salamanca

Address: Rda. del Corpus, 41, bajo, 37002 Salamanca

Mencía Clinic pioneer in Assisted Reproduction in Salamanca

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**Related internship programs:**  
-Obstetric and Gynecological Ultrasound





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*Take advantage of this opportunity to surround yourself with expert professionals and learn from their work methodology”*

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.



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

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

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



## Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson

We enhance the Case Study with the best 100% online teaching method: Relearning

*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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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 adapted in 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 assess and re-assess 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 Obstetric and Gynecological Ultrasound guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree qualification issued by TECH Technological University





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*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 Obstetric and Gynecological Ultrasound** contains the most complete and up-to-date program on the professional and academic scene

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree diploma 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 of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.

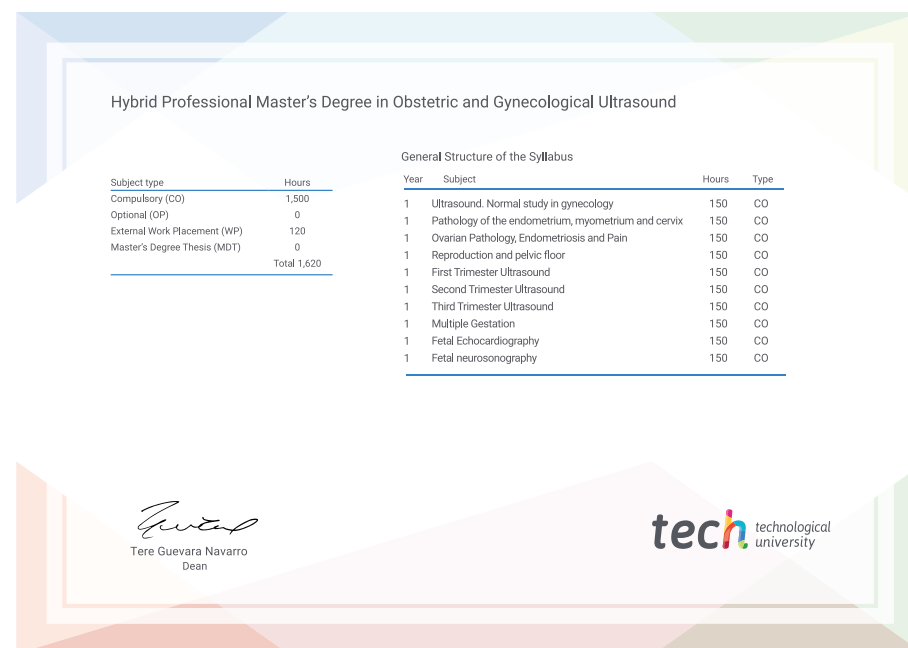
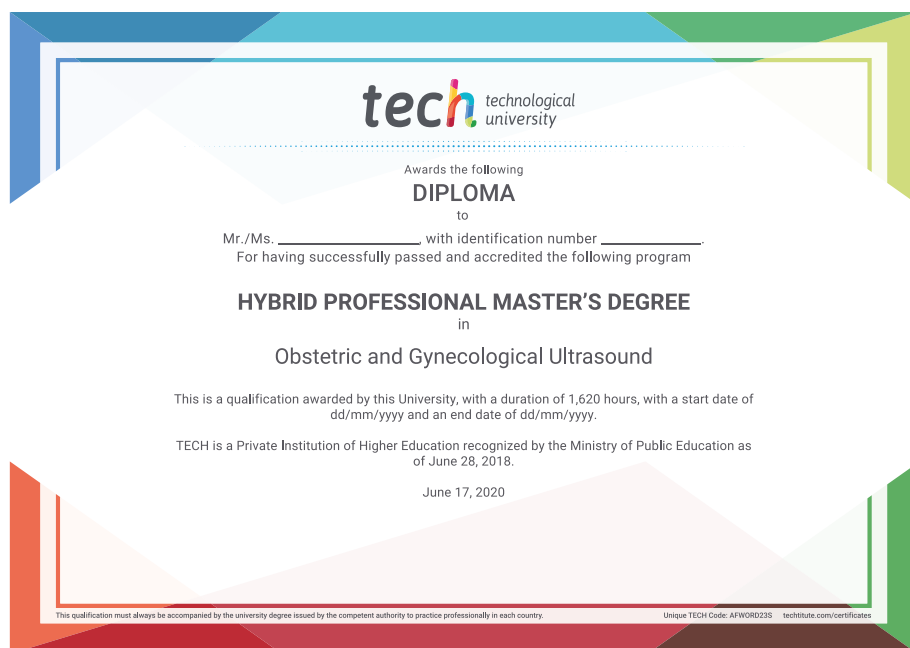
Title: **Hybrid Professional Master's Degree in Obstetric and Gynecological Ultrasound**

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

Duration: **12 months**

Certificate: **TECH Technological University**

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



\*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





**Hybrid Professional  
Master's Degree**

Obstetric and Gynecological  
Ultrasound

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

# Hybrid Professional Master's Degree

## Obstetric and Gynecological Ultrasound

