

# Postgraduate Certificate Placental Pathology and Fetal Growth Restriction





## Postgraduate Certificate Placental Pathology and Fetal Growth Restriction

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/placental-pathology-fetal-growth-restriction](http://www.techtute.com/us/medicine/postgraduate-certificate/placental-pathology-fetal-growth-restriction)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

In recent years, research in placental pathology and fetal growth restriction has undergone significant progress thanks to the use of innovative techniques and a better understanding of the pathophysiological processes involved. The placenta, once considered only as a passive organ, is now recognized as a key regulator of fetal development, and its study is essential for the prevention and management of fetal growth restriction and preeclampsia. In this context, this program is presented as an up-to-date and comprehensive degree for medical professionals and specialists who wish to update their skills in a constantly evolving area of obstetrics. In addition, the 100% online modality offers the flexibility and convenience and comfort necessary for its completion.





*Update your knowledge in Placental Pathology and Fetal Growth Restriction with the best online program on the market"*



In recent years, there have been significant advances in the understanding of the pathophysiology of placentation and the factors that influence it, including angiogenic and antiangiogenic factors. Likewise, the use of Doppler techniques in the study of the umbilical, cerebral and uterine arteries, among others, has improved the diagnosis and management of fetal growth restriction. However, these advances have also presented new challenges, such as the need for early screening and more effective prevention of preeclampsia.

In this context, the Postgraduate Certificate in Placental Pathology and Fetal Growth Restriction is presented, offering comprehensive training for medical professionals and specialists seeking to update their knowledge in this area. The program includes modules dedicated to the diagnosis and management of preeclampsia, eclampsia, HELLP syndrome, fetal growth restriction, and the application of the sFlt-2/PlGF ratio in clinical practice.

The program is delivered 100% online, allowing participants to access the materials from anywhere and at any time, with additional support and resources available online. This modality also allows participants to combine the postgraduate certificate with their professional and personal responsibilities.

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

- ◆ The development of case studies presented by experts in Fetal in Medicine
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ The practical exercises where the self-evaluation process can be carried out to improve learning
- ◆ Its special emphasis on innovative methodologies
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*Expand your knowledge on the pathophysiology of placentation and angiogenic and anti-angiogenic factors with this Postgraduate Certificate in Placental Pathology and Fetal Growth Restriction"*

“*Enroll now in this program and apply the sFlt-2/PIGF ratio in your clinical practice, updating your diagnostic methods and treatments and treatments of placental pathology and fetal growth restriction”*

The program includes in its teaching staff professionals of the field who pour into this training the experience of their work, in addition to recognized specialists from reference societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive training programmed to train in real situations.

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

*Do you want to deepen the Doppler study of the uterine arteries, the middle cerebral artery and other structures important in placental pathology and fetal growth restriction? and other structures important in placental pathology and fetal growth restriction? Don't hesitate and enroll.*

*Get up to date with the best teaching resources on the educational market: detailed videos, case studies or interactive summaries, among others.*



# 02 Objectives

The Posgraduate Certificate in Placental Pathology and Fetal Growth Restriction aims to provide medical professionals and specialists with the knowledge and skills necessary for an in-depth study of the pathophysiology of placentation and the management of fetal growth restriction and preeclampsia. Students will be able to deepen in the Doppler study of the uterine arteries, umbilical, middle cerebral, aortic isthmus, venous ductus and umbilical vein, among other issues.





“

*TECH Global University aims to provide you with a complete update on Placental Pathology. Enroll now”*



## General Objectives

---

- ◆ Provide a specific update that allows physicians to update their skills to exercise and lead the functions as specialists in the area of Fetal Medicine and Prenatal Diagnosis
- ◆ Update theoretical knowledge in the different fields of Fetal Medicine: basic and advanced obstetric ultrasound, prenatal diagnosis, maternal-fetal pathologies and placental pathologies
- ◆ Link the improvement of their medical practice with scientific research so that they can contribute to change and progress in their clinical environment through the application of the most innovative and effective guidelines and strategies in the field





## Specific Objectives

---

- ◆ Update knowledge on the mechanism of placentation and how it influences the development of pathologies such as Preeclampsia and fetal growth restriction
- ◆ Update on the rules to perform an adequate Doppler study in order to make a correct maternal and fetal hemodynamic assessment
- ◆ Know what early screening for preeclampsia and its prophylactic treatment consists of
- ◆ To know in an exhaustive and updated way the definition of Preeclampsia, severity criteria and treatment
- ◆ Identify fetal growth restriction, stages and management



*Your professional updating goals are now within your reach: take advantage of this opportunity and access the program that will bring you up to date immediately"*



03

# Course Management

The teaching staff of the Postgraduate Certificate in Placental Pathology and Fetal Growth Restriction is made up of experts in the field with extensive clinical and research experience. The teachers have extensive experience in this area, allowing the student to be updated by the hand of prestigious specialists, who will transmit the most advanced techniques in this field in a direct and immediate way.



“

*This teaching staff is composed of professionals of great prestige in the area of Fetal Medicine and you have the opportunity to update yourself with them"*



## Management



### Dr. Gallardo Arozena, Margarita

- ♦ FEA in Obstetrics and Gynecology at HU Nuestra Señora of Candelaria
- ♦ Founder and Medical Director of Natum Center - Ultrasound and Fetal Medicine
- ♦ Doctor in Health Sciences, University of La Laguna
- ♦ Master's Degree in Refresher for Gynecologists and Obstetricians from the University of Barcelona
- ♦ Master's Degree in Healthcare Management in Gynecology and Obstetrics from the Francisco de Vitoria University
- ♦ Diploma in Fetal Medicine and Surgery from the Fetal Medicine Foundation (King's College Hospital, London). Invasive techniques and intrauterine fetal therapy at San Cecilio Granada University Hospital
- ♦ Postgraduate Certificate Training in obstetric-gynecological ultrasound by the Spanish Society of Gynecology and Obstetrics (SEGO)
- ♦ Researcher and Author of scientific articles published in high-impact journals
- ♦ Member of the Prenatal Diagnosis Unit at the Human Reproduction Assistance Center of the Canary Islands (FIVAP)

## Professors

### Dr. Caamiña Álvarez, Sara

- ♦ Doctor Specialist in Obstetrics and Gynecology at HU Nuestra Señora of Candelaria
- ♦ Author of several scientific articles related to Obstetrics and Gynecology
- ♦ Speaker at national and international medicine congresses
- ♦ Researcher in different projects related to the maternal-fetal area, pregnancy and childbirth
- ♦ Master's Degree Refresher for Gynecologists and Obstetricians from the University of Barcelona

### Dr. De Ganzo Suárez, Tania del Carmen

- ♦ Medical Specialist in Obstetrics and Gynecology at the Nuestra Señora de Candelaria University Hospital
- ♦ Medical Specialist at the Fetal Medicine Unit of the Tenerife Hospiten Group
- ♦ Diploma in Fetal Medicine and Surgery from the Fetal Medicine Foundation (King's College Hospital, London). Invasive techniques and intrauterine fetal therapy at San Cecilio Granada University Hospital
- ♦ Postgraduate Certificate Training in obstetric-gynecological ultrasound by the Spanish Society of Gynecology and Obstetrics (SEGO)
- ♦ Researcher and Author of scientific articles published in high-impact journals



**Dr. De Paco Matallana, Catalina**

- ◆ Specialist in Maternal-Fetal Medicine Unit, Hospital Clínico Universitario Virgen de Zaragoza
- ◆ Regular reviewer of articles in international and national journals on Gynecology and Obstetrics
- ◆ Associate Professor of Obstetrics and Gynaecology at Murcia University
- ◆ PhD in Medicine and Surgery
- ◆ Degree in Medicine and Surgery from the University of Murcia
- ◆ Specialist MIR in Gynecology and Obstetrics
- ◆ Subspecialization in Fetal Medicine and Surgery at the King's College University Hospital in London

**Dr. Plasencia Acevedo, Walter**

- ◆ Medical Specialist in Obstetrics and Gynecology at University Hospital of the Canary Islands
- ◆ Specialised doctor of the Fetal Medicine Unit of Canary Hospiten Group
- ◆ Doctor in Medicine and Surgery from the University of La Laguna
- ◆ Subspecialization in Fetal Medicine and Surgery at the King's College University Hospital in London
- ◆ Supervisor of more than 3,000 ultrasound studies per year
- ◆ Author of over 50 scientific publications in international high-impact journals
- ◆ Director of several national and international research projects on fetal anomalies, placental abnormalities, preeclampsia, preterm delivery and fetal and maternal complications during gestation
- ◆ Regular reviewer of articles in multiple international and national journals in his specialty

# 04

## Structure and Content

The syllabus of the Postgraduate Certificate in Placental Pathology and Fetal Growth Restriction comprehensively addresses the most relevant aspects of these pathologies. The objectives of the program include the acquisition of updated knowledge on the pathophysiology of placentation, the Doppler study of the uterine arteries, umbilical artery, middle cerebral, aortic isthmus, venous ductus and umbilical vein, and its application in the diagnosis and monitoring of fetal growth restriction and preeclampsia.



“

*Get up to date with the most advanced and complete syllabus in Placental Pathology”*



## Module 1. Placental Pathology and Fetal Growth Restriction

- 1.1. Pathophysiology of Placentation. Angiogenic and Antiangiogenic Factors
- 1.2. Basis for the Doppler Study
  - 1.2.1. Umbilical Artery
  - 1.2.2. Middle Brain Artery
  - 1.2.3. Uterine Arteries
  - 1.2.4. Aortic Isthmus
  - 1.2.5. Ductus Venosus
  - 1.2.6. Umbilical Vein
- 1.3. Early Screening and Prevention of Preeclampsia
- 1.4. Diagnosis and Management of Preeclampsia
  - 1.4.1. Definition
  - 1.4.2. Determination of the Degree of Severity
  - 1.4.3. Treatment
- 1.5. Eclampsia
- 1.6. HELLP Syndrome
- 1.7. Fetal Growth Restriction
  - 1.7.1. Pathophysiological Bases
  - 1.7.2. Classification
  - 1.7.3. Follow-up and Management
- 1.8. Early IUGR
- 1.9. Late-Onset IUGR
- 1.10. Application of the sFlt-/PIGF ratio in clinical practice







“

*The 100% online methodology used to develop the program will allow you to study without interrupting your professional work”*

# 05 Methodology

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

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



“

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

## At TECH we use the Case Method

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

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



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



“

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

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

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





## Relearning Methodology

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

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

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



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

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

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

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

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



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



#### Study Material

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

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



#### Surgical Techniques and Procedures on Video

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



#### Interactive Summaries

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

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



#### Additional Reading

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





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

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



#### Testing & Retesting

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



#### Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

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





# 06 Certificate

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





“

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

This program will allow you to obtain your **Postgraduate Certificate in Placental Pathology and Fetal Growth Restriction** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Postgraduate Certificate in Placental Pathology and Fetal Growth Restriction**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





## Postgraduate Certificate

Placental Pathology and  
Fetal Growth Restriction

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

# Postgraduate Certificate Placental Pathology and Fetal Growth Restriction

