Postgraduate Diploma

Scientific and Neuroscientific Evidence in Natural Childbirth

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Postgraduate Diploma

Scientific and Neuroscientific Evidence in Natural Childbirth

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/pk/medicine/postgraduate-diploma/postgraduate-diploma-scientific-neuroscientific-evidence-natural-childbirth**

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01

Introduction

Motherhood requires biological and psychological adaptations whose purpose is to ensure the survival of both the newborn and the mother. These changes are relevant at the brain level, as recent studies have determined significant modifications in the mother's cognitive sphere during the two years following childbirth. This only demonstrates the importance of the specialist physician keeping up to date with the scientific and neuroscientific evidence of Natural Childbirth, something that they will achieve with this certification. Through it, they will delve into Social Cognition, Empathy, maternal adaptations, as well as the role of hormones. All of this in 450 hours and 100% online.

Update yourself on the fundamentals of scientific and neuroscientific evidence of Natural Childbirth from home or any location"

Over the past few years, there has been a growing interest in how Natural Childbirth affects both the mother and the baby. In this regard, advances in Neuroscience have allowed for a better understanding of the mother-child connection during childbirth and the importance of Breastfeeding for the newborn's brain development.

Therefore, it is essential for health professionals to stay updated on the latest scientific and neuroscientific research on Natural Childbirth and be able to apply the most recent advances in childbirth care. With this goal in mind, this Postgraduate Diploma was created, offering an academic opportunity for specialist physicians to explore the brain changes that occur during pregnancy and postpartum, as well as the profound mother-child connection, the importance of Breastfeeding, and the role of Oxytocin in bonding.

This Postgraduate Diploma is based on a convenient 100% online format and is led by a team of prominent experts in the field of Gynecology and Obstetrics. In fact, students will benefit from their valuable experience, which is reflected in the educational materials on the Virtual Campus. Furthermore, it is a program that can be perfectly balanced with clinical practice and any personal obligations, as resources can be managed at their complete convenience.

This **Postgraduate Diploma in Scientific and Neuroscientific Evidence in Natural Childbirth** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Scientific and Neuroscientific Evidence in Natural Childbirth
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

Consolidate your updates on the Science and Neuroscience of Natural Childbirth through the largest digital library of resources on this subject”

Examine in detail the clinical approach to behavioral changes in Motherhood with self-awareness exercises and masterclasses"

Embark on a unique academic journey through the changes in the female brain during pregnancy and postpartum.

Do not miss the opportunity to delve deeper with TECH into the evolution of brain plasticity during the transition to Motherhood.

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

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

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

02

Objectives

The objective of the Postgraduate Diploma is to provide health professionals with specialized knowledge in advanced scientific and neuroscientific evidence in Natural Childbirth. Through this academic journey, they will be able to apply these competencies in their daily clinical internship and enhance maternal and child care. The analysis of brain plasticity during Motherhood and the importance of research in animals and humans in this field will play a significant role.

Achieve the objectives of the Postgraduate Diploma and launch your medical career as the expert in Natural Childbirth that families are looking for"

General Objectives

- Acquire fundamental knowledge about the physiology of Natural Childbirth, ancient cultural practices, and the emotional needs of women during childbirth, as well as the implications of medical interventions
- Acquire essential skills and knowledge for the care of pregnant women and their fetuses, including promoting healthy pregnancies and identifying potential complications
- Acquire fundamental knowledge and skills in the diagnosis, management, and prevention of childbirth emergencies, with a focus on interprofessional collaboration and patient rights advocacy
- Acquire fundamental knowledge and skills in the assessment, diagnosis, and management of neonatal emergencies, with an emphasis on early problem recognition and the application of appropriate interventions
- Emphasize fundamental knowledge about the neuroscience of pregnancy, motherhood, and perinatal care, as well as the scientific evidence related to Natural Childbirth and evidence-based care practices
- Acquire fundamental knowledge about home births, including team management and organization, pregnancy, childbirth, and postpartum preparation and support, as well as the identification and management of special situations and home obstetric emergencies
- Acquire fundamental knowledge about Natural Childbirth units, such as birthing centers and hospital units, and develop skills to assess, plan, and manage these environments, ensuring a high level of care and satisfaction for women and their families
- Acquire fundamental knowledge and practical skills in newborn care, as well as the ability to provide comprehensive and safe care in this critical stage of life and collaborate with other health professionals and families to ensure the well-being of the newborn
- Acquire knowledge about the physical and emotional needs of the mother during the perinatal period
- Develop skills to provide emotional support and comprehensive care to the mother during the postpartum period, including difficult and emotionally intense situations
- Promote the prevention and care of maternal mental health during the perinatal period, including the detection and treatment of mood disorders and addressing obstetric trauma and obstetric violence
- Analyze the stages of labor and pain management and relaxation techniques
- Develop skills in creating and monitoring personalized birth plans
- Examine the importance of interdisciplinary collaboration in childbirth care
- Promote emotional preparation and support for women and their families during the childbirth process
- Acquire skills to identify and manage high-risk situations in pregnancy and childbirth

You are facing the academic degree that will allow you to delve into emotional preparation for childbirth" Have you not enrolled yet?"

Specific Objectives

Module 1. Natural Childbirth

- Analyze the science and evolution of Natural Childbirth, and how current medical practices compare to historical and global statistics
- Examine the physiology of normal childbirth in the human species, including the hormonal cocktail, positions, and female sexuality
- Analyze childbirth practices in ancestral cultures and their relevance in the present
- Identify and address the emotional needs of women during childbirth and how professionals can support them
- Thoroughly analyze the role of Oxytocin in Natural Childbirth and the differences between endogenous and exogenous Oxytocin
- Examine current pandemics related to childbirth and their impact on the health of women and newborns
- Delve into the needs of the newborn during and after childbirth, including intestinal and epidermal flora, the umbilical cord, and placental blood
- Analyze the intervention in childbirth and how it affects the environment and safety, as well as the importance of respecting the nature of the process

Module 2. Scientific and Neuroscientific Evidence

- Analyze brain plasticity during Motherhood and the importance of research in animals and humans in this field
- Examine brain changes in rodents and humans during pregnancy and postpartum and the involvement of hormones in Motherhood
- Examinie the Neurobiology of Breastfeeding and how empathy and altruism influence baby care
- Navigate neuroscientific research to psychosocial interventions and emotional and cognitive support for future mothers and fathers
- Analyze the scientific evidence in Natural Childbirth and evidence-based care practices
- Examine the use of non-invasive technology and analgesia and anesthesia in Natural Childbirth
- Identify the benefits and risks of Natural Childbirth and adapting care according to the context, including hospital and home settings

Module 3. Delivery Preparation

- Convey to pregnant women the ability to understand changes in the maternal body and fetal development
- Thoroughly examine different techniques in the stages of labor
- Deepen prenatal exercises and physical preparation
- Identify nutrition needs during pregnancy
- Deepen preferences in creating a birth plan
- Deepen emotional preparation for childbirth
- Deepen family involvement in education and childbirth preparation

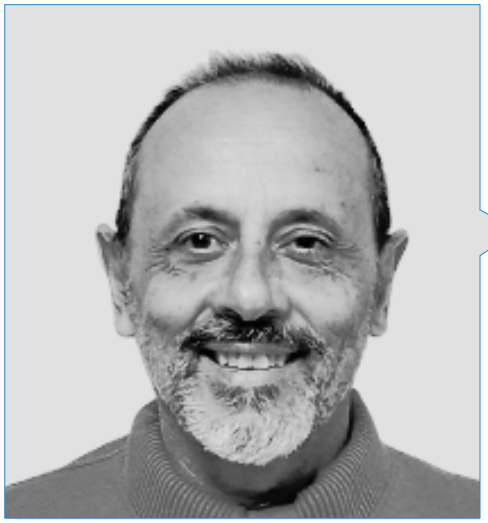
03

Course Management

The teaching team of the Postgraduate Diploma is composed of specialists who have excelled in the field of Obstetrics and Gynecology, with extensive academic and professional experience. All the teachers have a multidisciplinary approach in their teaching, combining knowledge in Medicine, Biology, and Psychology. In addition, they have a strong research background, being authors of important books on the pregnancy process. Combined with their work in leading healthcare institutions, they position themselves as the student's best asset in this certificate.

Get all the keys to the scientific and neuroscientific evidence of Natural Childbirth from renowned experts in Gynecology and Obstetrics"

Management



Dr. Santos Leal, Emilio

- Specialist Doctor at Fundación Alcorcón University Hospital
- Doctor Specialist at the General University Hospital Consortium of Valencia
- Specialist at Pius Hospital in Valls
- Medical Specialist at Perpetuo Socorro Clinic
- Specialization in Gynecology and Obstetrics from San Carlos Clinical Hospital
- Graduate in Medicine and Surgery from the University of Cantabria

04

Structure and Content

The syllabus of the Postgraduate Diploma in Scientific and Neuroscientific Evidence in Natural Childbirth is presented with a multidisciplinary approach, rigorously and comprehensively addressing the most relevant aspects of this field. Additionally, the pedagogical methodology used in the program is Relearning, promoting targeted repetition of the syllabus concepts through dynamic resources such as explanatory videos, lectures, and practical cases.

A meticulously designed syllabus by the teaching team to make you a knowledgeable expert in the subject in just 450 hours"

Module 1. Natural Childbirth

1.1. Natural Childbirth
- 1.1.1. Science versus dogma
- 1.1.2. Evolution as a species
- 1.1.3. Worldwide statistics: oxytocin, analgesia, episiotomies, cesarean sections
- 1.1.4. Improving the statistics

1.2. Normal childbirth in the human species
- 1.2.1. Hormonal cocktail in normal childbirth
- 1.2.2. Positions in normal childbirth
- 1.2.3. Female sexuality
- 1.2.4. Physiology of the sexual act

1.3. Childbirth in ancestral cultures
- 1.3.1. Childbirth among the Taínos, Guanajatabeyes, and Siboneyes
- 1.3.2. Childbirth before the Sumerians
- 1.3.3. Orgasmic childbirth
- 1.3.4. Michel Odent

1. 4. Emotional needs of laboring women
- 1.4.1. Empowerment
- 1.4.2. Intimacy
- 1.4.3. Delivery
- 1.4.4. Majesty

1.5. Needs of the professional attending laboring women
- 1.5.1. Secrecy
- 1.5.2. Professional attitude towards pain
- 1.5.3. Respect for the majesty of the moment
- 1.5.4. Priviledge

1.6. The Why of Emotional Needs
- 1.6.1. Comfort
- 1.6.2. Intimacy
- 1.6.3. Connection with the most primal
- 1.6.4. Connection with the most spiritual

1.7. Oxytocin
- 1.7.1. The hemato-placental barrier
- 1.7.2. The blood-brain barrier
- 1.7.3. Endogenous oxytocin
- 1.7.4. Exogenous oxytocin

1.8. Current pandemics
- 1.8.1. The cesarean pandemic
- 1.8.2. The immunological disorders pandemic
- 1.8.3. The autism pandemic
- 1.8.4. The hyperactivity and attention deficit pandemic

1.9. Newborn Needs
- 1.9.1. Intestinal flora
- 1.9.2. Skin flora
- 1.9.3. The Umbilical Cord
- 1.9.4. Placental blood

1.10. Interventionism
- 1.10.1. Amending nature
- 1.10.2. Intervening calls for intervention
- 1.10.3. The chain of interventionism
- 1.10.4. Environment and safety in childbirth

Access the syllabus of the Postgraduate Diploma in Natural Birth on your tablet or computer at any time of the day and download it for offline consultation as well"

Module 2. Scientific and Neuroscientific Evidence

2.1. Neuroscience of Pregnancy and Maternity
- 2.1.1. Brain Plasticity During the Transition to Motherhood
- 2.1.2. Comparison of Studies in Animals and Humans
- 2.1.3. Evolution and Biological Mechanisms of Maternal Care
- 2.1.4. Hormones and Their Role in Motherhood

2.2. Animal Models in Maternity Research
- 2.2.1. Brain Changes in Animals During Pregnancy and Offspring Care
- 2.2.2. Hormones and Regulation of Maternal Behavior in Animals
- 2.2.3. Applications of Animal Findings to Human Research

2.3. Brain Changes in Human During Pregnancy and Postpartum
- 2.3.1. Brain Reorganization During Pregnancy
- 2.3.2. Limbic System and Mother-Child Connection
- 2.3.3. Social Cognition, Empathy, and Maternal Adaptations

2.4. Clinical Implications and Practical Applications
- 2.4.1. Impact of Breastfeeding and Care on Caregiver's Brain
- 2.4.2. Neurobiology of Breastfeeding
- 2.4.3. Clinical Approach to Behavioral Changes in Motherhood

2.5. Oxytocin and Its Role in Bonding
- 2.5.1. Oxytocin in Humans
- 2.5.2. Oxytocin in baby
- 2.5.3. Oxytocin in Maternal Care

2.6. Scientific Evidence in Pregnancy Monitoring
- 2.6.1. Nutrition in pregnancy
- 2.6.2. Diabetes screening
- 2.6.3. Weight Gain

2.7. Evidence-Based Delivery Care Practices
- 2.7.1. Labor Monitoring
- 2.7.2. Non-Invasive Technology
- 2.7.3. Analgesia and Anesthesia

2.8. Evidence-Based Intervention I
- 2.8.1. Big baby
- 2.8.2. Prolonged gestation
- 2.8.3. Rupture of membranes

2.9. Evidence-Based Intervention II
- 2.9.1. Oxytocin IV
- 2.9.2. Fetal distress
- 2.9.3. Labor Induction

2.10. Evidence-Based Intervention III
- 2.10.1. Cord cutting
- 2.10.2. Delivery

Module 3. Delivery Preparation

3.1. Anatomy and physiology of pregnancy
- 3.1.1. Changes in the maternal body
- 3.1.2. Fetal Development
- 3.1.3. Hormonal process
- 3.1.4. Preparation for labor

3.2. Stages of labor
- 3.2.1. First Stage: Dilatation
- 3.2.2. Second Stage: Expulsion
- 3.2.3. Third Stage: Delivery
- 3.2.4. Fourth Stage Recovery

3.3. Relaxation and breathing techniques
- 3.3.1. Deep and controlled breathing
- 3.3.2. Visualization Techniques
- 3.3.3. Massages and muscle relaxation techniques
- 3.3.4. Mindfulness and meditation

3.4. Prenatal exercises and physical preparation
- 3.4.1. Muscle strengthening
- 3.4.2. Flexibility and mobility
- 3.4.3. Specific exercises for childbirth
- 3.4.4. General physical activity recommendations

3.5. Nutrition during pregnancy
- 3.5.1. Specific Nutritional Needs
- 3.5.2. Recommended and not recommended foods
- 3.5.3. Weight Control
- 3.5.4. Vitamin and mineral supplements

3.6. Birth plan development
- 3.6.1. Personal preferences
- 3.6.2. Pain Relief Methods
- 3.6.3. Birth positions
- 3.6.4. Contingency Plans

3.7. Interdisciplinary collaboration in childbirth care
- 3.7.1. Role of each professional in childbirth care
- 3.7.2. Development of clinical skills in childbirth care
- 3.7.3. Childbirth care in interdisciplinary teams
- 3.7.4. Leadership skills in obstetric care

3.8. Emotional preparation for childbirth
- 3.8.1. Managing fear and anxiety
- 3.8.2. Emotional support from the partner and family
- 3.8.3. Coping techniques
- 3.8.4. Emotional connection with the baby

3.9. Childbirth preparation for high-risk patients
- 3.9.1. Identification and management of risk factors
- 3.9.2. Medical planning and follow-up
- 3.9.3. Specific interventions and care
- 3.9.4. Emotional support and additional resources

3.10. Family involvement in childbirth education and preparation
- 3.10.1. Inclusion of the partner and other family members
- 3.10.2. Prenatal classes and joint educational activities
- 3.10.3. Preparation for emotional and practical support
- 3.10.4. Adaptation and family roles in the postpartum

05

Methodology

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

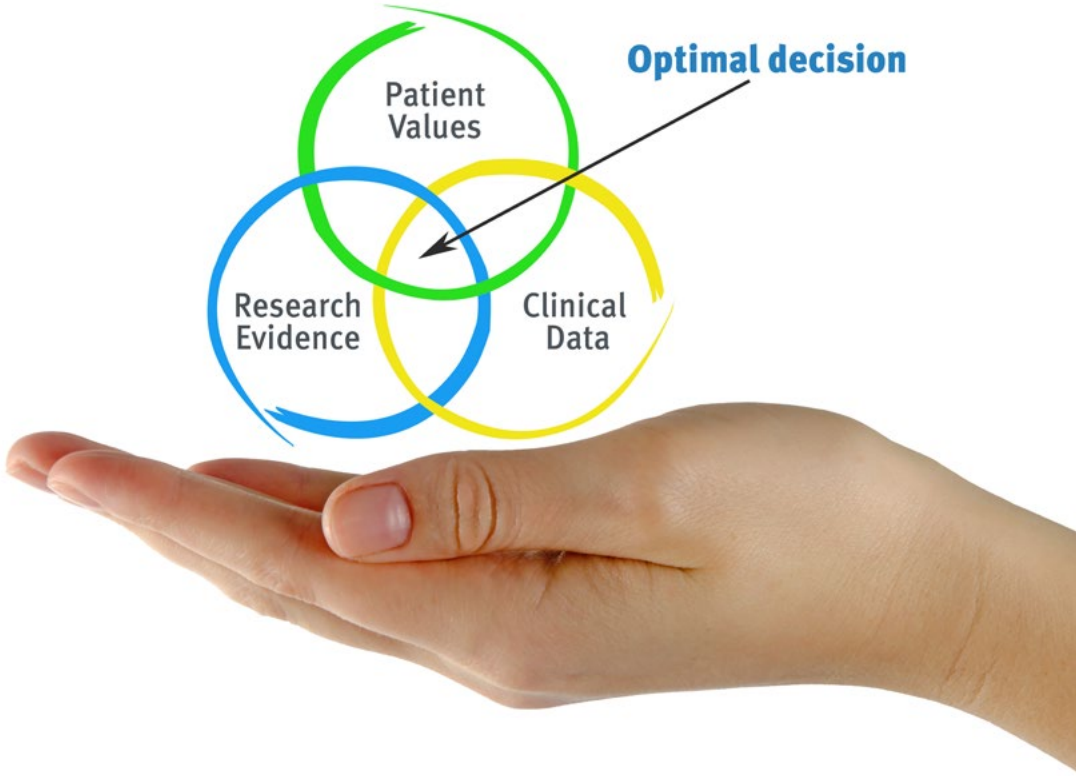
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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:

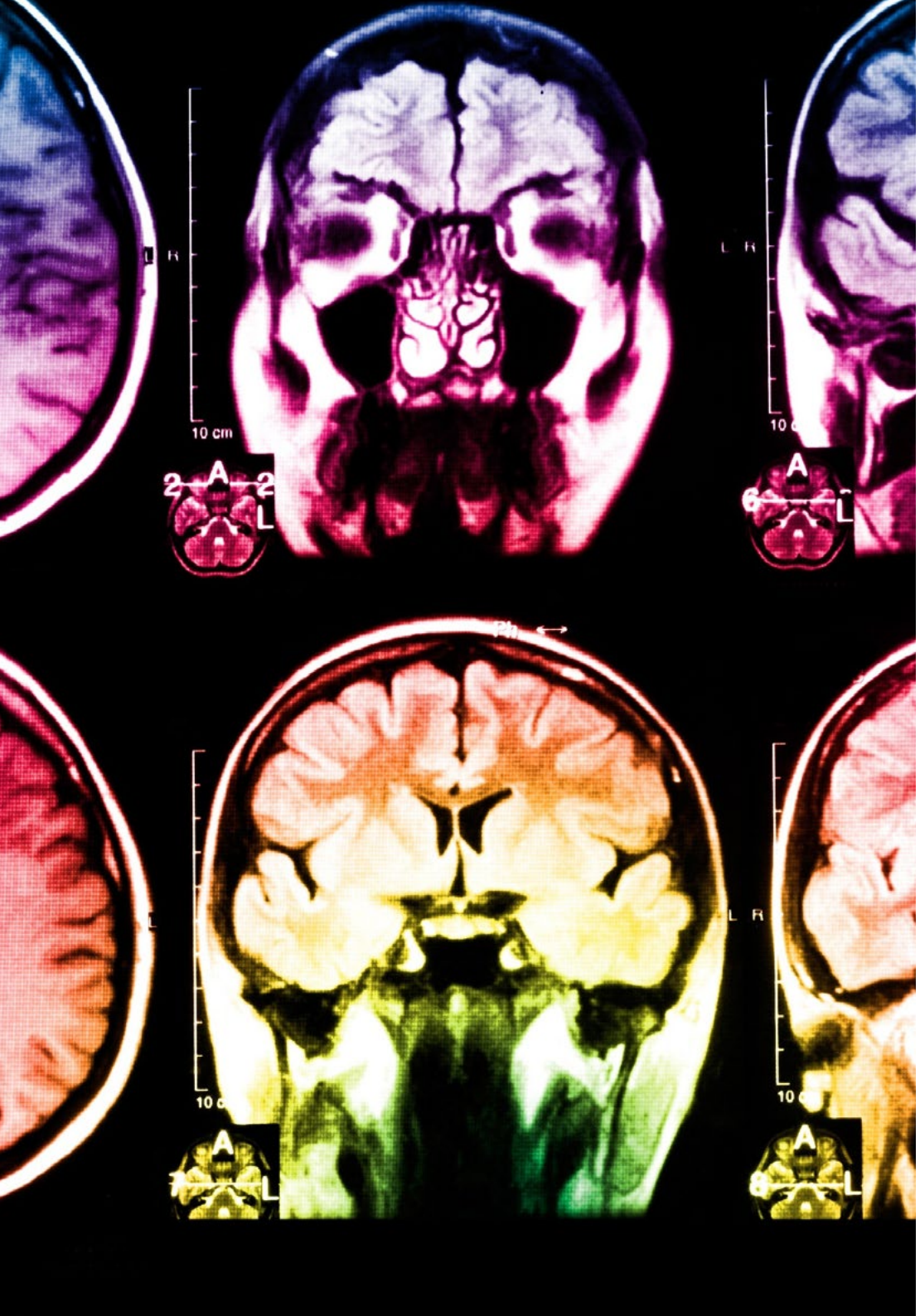
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better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

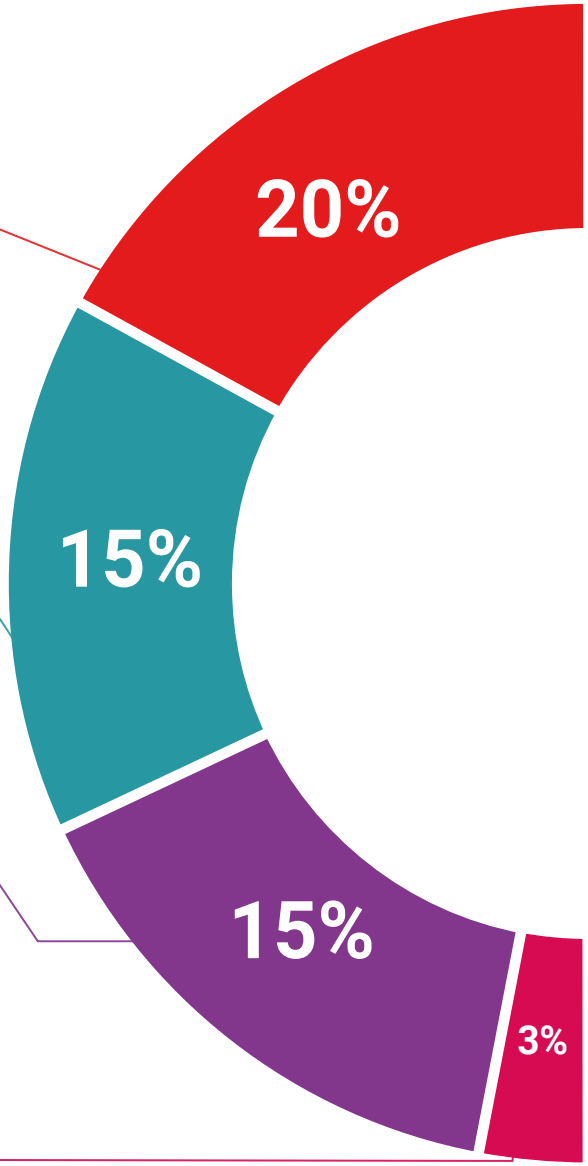
Interactive Summaries

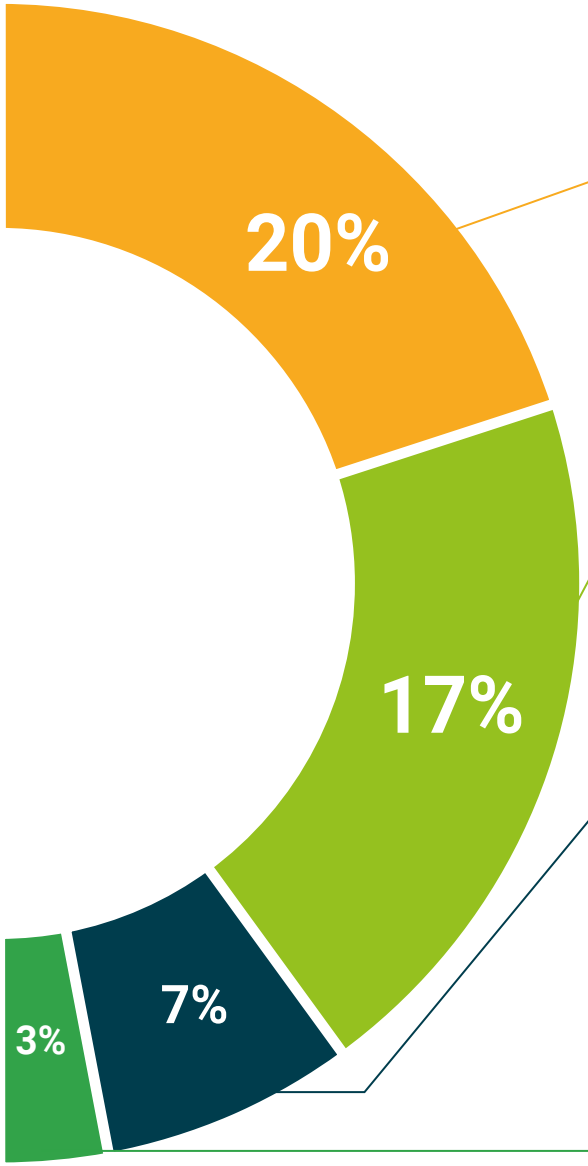
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 Diploma in Scientific and Neuroscientific Evidence in Natural Childbirth guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.

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

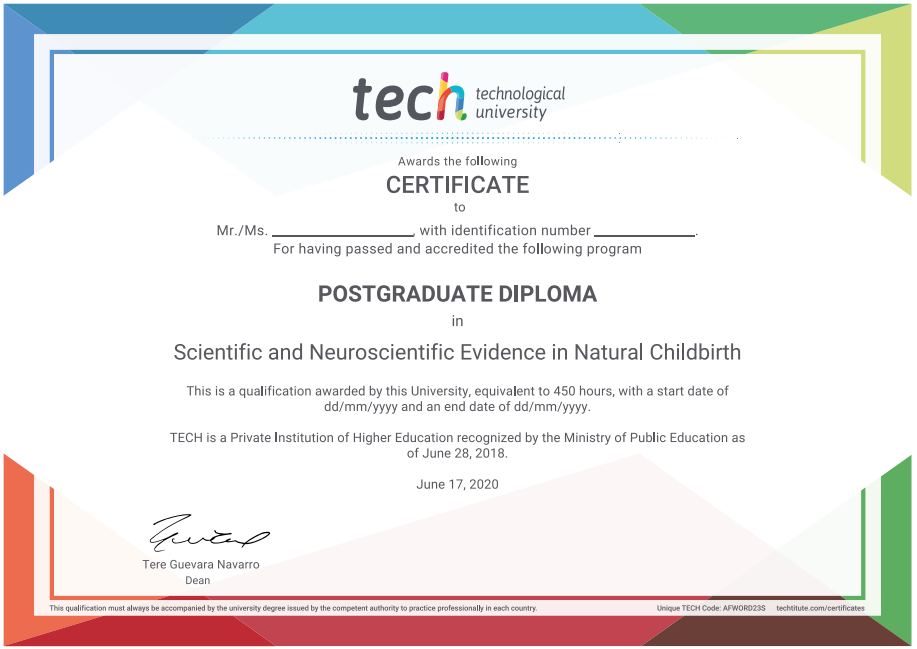
This **Postgraduate Diploma in Scientific and Neuroscientific Evidence in Natural Childbirth** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Scientific and Neuroscientific Evidence in Natural Childbirth**

Official Nº of Hours: **450 h.**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Awards the following

CERTIFICATE

to

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

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Scientific and Neuroscientific Evidence in Natural Childbirth

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

June 17, 2020

Tere Guevara Navarro
Dean

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

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

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