

# Postgraduate Diploma

## Pediatric Preventive and Interceptive Orthodontics





## Postgraduate Diploma Pediatric Preventive and Interceptive Orthodontics

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 20 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/dentistry/postgraduate-diploma/postgraduate-diploma-pediatric-preventive-interceptive-orthodontics](http://www.techtute.com/us/dentistry/postgraduate-diploma/postgraduate-diploma-pediatric-preventive-interceptive-orthodontics)

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# 01

# Introduction

Over time, advances in orthodontics have led to greater acceptance of its use by the population and a greater understanding of the benefits of its preventive and corrective use, especially in children. A task that has taken a lot of hard work on the part of dental professionals. This 100% online program offers students the possibility of updating their knowledge in this field with an agile and flexible teaching method, taught by a large team of specialized teachers with extensive professional experience in this field.





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*With this Postgraduate Diploma, you will comfortably achieve the update you are looking for in pediatric interceptive orthodontics"*

Maintaining proper oral health and preventing oral diseases is a real challenge for dental professionals, especially when they encounter reluctance or a lack of understanding on the part of the child and adolescent population of the benefits of pediatric preventive and interceptive orthodontics. A need, however, that a large part of the population sees as important. In this scenario there are constant changes, professionals must be aware of the latest advances in this field. With this in mind, this Postgraduate Diploma is born, which will be taught by an extensive teaching team specialized in pediatric dentistry.

An intensive program, where over 6 months, the professional will be able to renew their knowledge on the fundamentals of pediatric dentistry, orofacial structures and associated pathologies, as well as the main techniques and diagnostic tests used in preventive pediatric and dental caries. Likewise, this Postgraduate Diploma will dedicate a segment to pediatric orthodontics itself, where you will be able to learn about recent advances that have been made and the scientific studies that support the use of certain techniques and tools.

All this with a Relearning system, used by TECH in all its publications, which will allow students to reduce the long hours of study. In addition, you will have multimedia material (video summaries, detailed videos, interactive diagrams) with which you can delve into the subject matter in a more visual and enjoyable way. An opportunity provided by this academic institution to all dental professionals who want to keep abreast of the latest developments in their field through a program that can be taken comfortably, whenever and wherever you want. All you need is an electronic device (computer, tablet or cell phone) with internet connection to update your knowledge. A 100% online modality, without fixed schedules, which allows you to combine your personal responsibilities with quality teaching.

However, one of the most outstanding features of this Postgraduate Diploma is the inclusion in the teaching team of a prestigious figure in the field of Pediatric Dentistry. A professional of the highest level, endorsed not only by an extensive and successful career in the clinical field, but also by a series of international awards that place him as a benchmark in this field. Therefore, through 100 minutes of masterclasses in video format, the graduate will be able to update their practice based on the strategies and guidelines of one of the best professionals in their specialty.

This **Postgraduate Diploma in Pediatric Preventive and Interceptive Orthodontics** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ Practical cases presented by experts in Dentistry
- ♦ 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



*A Postgraduate Diploma with which you will be aware of the most appropriate materials in preventive orthodontics"*



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*The program includes 100 minutes of video elaborated by a professional of the highest level in the field of Pediatric Dentistry”*

The program’s teaching staff includes professionals from the sector who contribute their work experience to this 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 knowledge 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*With this Postgraduate Diploma, you will have access to the latest scientific postulates about changes in orofacial structures and associated pathologies.*

*A Postgraduate Diploma that gives you the opportunity to refresh your knowledge about clinical problems during the eruption of teeth in a flexible way.*



# 02

## Objectives

This program is aimed at dental professionals who are looking for an education that allows them to keep abreast of the latest developments in Pediatric Preventive and Interceptive Orthodontics. Therefore, at the end of the 500 hours that make up this Postgraduate Diploma students will have updated their knowledge on the main techniques currently used in the pediatric population, taking into account the pathologies they present. The teaching team that teaches this program will accompany the students during the development of this program so that they can achieve their objectives.







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*Incorporate the latest advances in orthodontics and preventive pediatric dentistry into your daily practice”*



## General Objectives

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- Update the professional's knowledge in the different areas covered by comprehensive dental care in pediatric patients from birth to 14 years of age, with data-based scientific evidence
- Promote work strategies based on a comprehensive approach to the patient and individualized attention to each child according to their age and medical, dental and emotional needs
- Encourage the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific training
- Encourage professional stimulation through continuing education and research
- Promote understanding of the integral and multidisciplinary nature of pediatric dentistry, the importance of orderly, systematized and ethical teamwork and the role of the dentist working with the pediatric population as a health educator for children and their families



*A Postgraduate Diploma that will show you the most common procedures used in dental restoration"*





## Specific Objectives

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### Module 1. Pediatric Dentistry: Basics

- ◆ Identify and describe the stages of cognitive, emotional and social development of children and adolescents
- ◆ Recognize the psychological profile of the child and adolescent
- ◆ Assess possible patient behavior in the dental clinic
- ◆ Analyze the factors that impact the child's behavior
- ◆ Establish the different classifications of patients according to their behavior
- ◆ Describe non-pharmacological behavior management techniques
- ◆ Explain pharmacological management alternatives for uncooperative children
- ◆ Distinguish the different levels of sedation from each other and from general anesthesia
- ◆ Explain the action protocols in each case
- ◆ List the most commonly used drugs for sedation and their antagonists
- ◆ Describe the inherent advantages and risks in the pharmacological sedation procedure
- ◆ Perform adequate basic behavioral guidance in patients according to their ages and cognitive and emotional capacities
- ◆ Explain the different stages of dental learning and their chronology
- ◆ Define the evolution of the different teeth during childhood and adolescence and their characteristics
- ◆ Identify and name temporary and permanent teeth
- ◆ List the differences between primary and permanent teeth and their clinical implications



### **Module 2. Growth and Development: Changes in Orofacial Structures and Associated Pathologies**

- ♦ Recognize and differentiate primary, mixed first and second stage and permanent teeth, clinically and radiographically
- ♦ Describe the process a drug undergoes in a child's body from the time it is administered until it is excreted
- ♦ Identify differences in drug pharmacokinetics between children and adults and in childhood between different ages
- ♦ Review the main drugs used in pediatric dentistry
- ♦ Explain the importance of the general clinical and stomatological examination in the pediatric patient
- ♦ Recognize the need for systematic and careful collection of clinical data for an appropriate diagnosis

### **Module 3. Preventive Pediatric Dentistry**

- ♦ Recognize the structures that make up the healthy mouth of an edentulous infant and its physiology
- ♦ Reflect on the rationale and basics of baby dentistry
- ♦ Value an early establishment of the dental home
- ♦ Explain the multifactorial nature of caries and the multifaceted approach to caries prevention
- ♦ Explain the various methods of preventing dental caries and their application at different ages
- ♦ Develop appropriate prevention and maintenance plans for each patient
- ♦ Identify the most frequent deviations from normality in relation to tooth number and size, enamel, alterations and dentin structure alterations

- ♦ Identify the origin and consequences of alterations in tooth number and size, enamel structure and dentin structure alterations
- ♦ Define the criteria for the selection of complementary tests to correctly diagnose these disorders
- ♦ Explain the criteria for selecting the appropriate therapeutic option in each case

### **Module 4. Pediatric Orthodontics**

- ♦ Apply the extraction protocol in pediatric patients, especially in primary teeth
- ♦ Describe the surgical treatment of the most common soft tissue disorders in children
- ♦ Explain the indications for postoperative surgery in pediatric dentistry
- ♦ Define the concept of therapeutic remineralization in incipient caries lesions
- ♦ Recognize the main remineralizing agents currently used and reflect on their mechanisms of action
- ♦ Explain the indications, contraindications and techniques for the use of different restorative materials
- ♦ Acquire the necessary criteria to select the most appropriate material in each case
- ♦ Identify the advantages of using absolute isolation when treating a cavitated caries lesion
- ♦ Define the most frequent location of caries development in primary and permanent molars
- ♦ List the necessary steps (procedure, material and criteria) for the preparation of a temporary molar to be restored with a preformed steel crown
- ♦ List the necessary steps (procedure, material and criteria) for the preparation of a temporary tooth to be restored with a preformed aesthetic crown
- ♦ List the necessary steps (procedure, material and criteria) for the preparation of a preformed steel crown for the restoration of a permanent molar



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*A Postgraduate Diploma that will show you the most common procedures used in dental restoration”*

03

# Course Management

The management and the extensive teaching staff that make up this Postgraduate Diploma have been selected by TECH based on their high professional qualifications and extensive experience in the care and management of patients in the infantile and juvenile stage. Likewise, the human quality and proximity have also been taken into account by this academic institution for their inclusion in this program. All this, to offer students who study this program, a quality education available to all.







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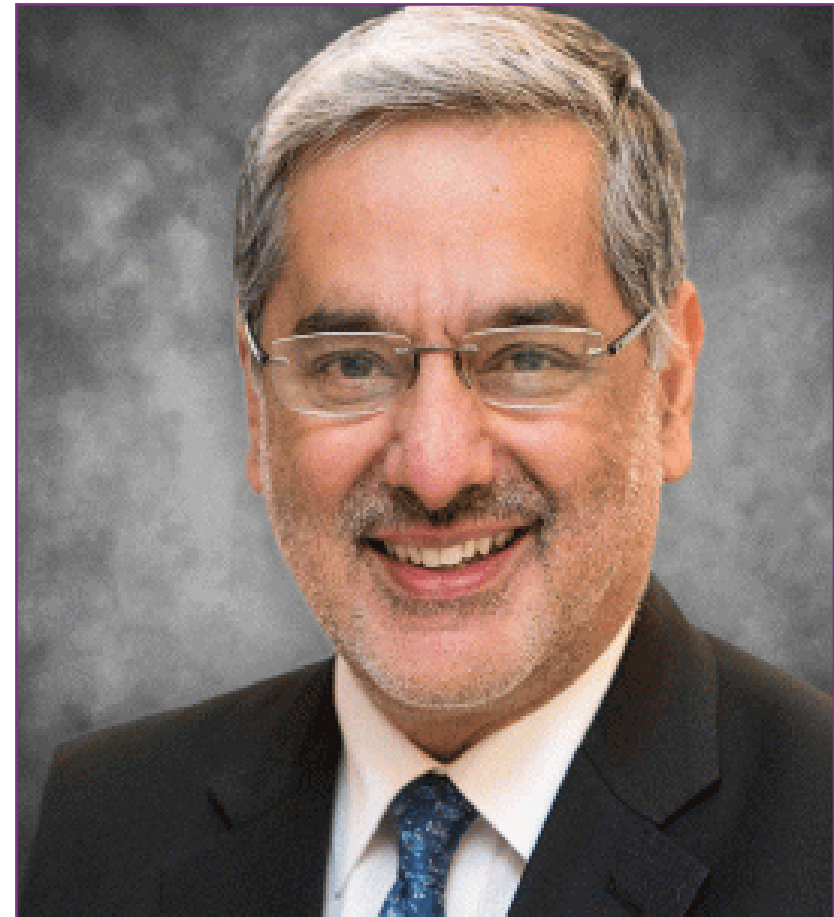
*This Postgraduate Diploma has an extensive faculty, which will provide you with the latest knowledge in preventive orthodontics"*

## International Guest Director

Professor Raman Bedi is the Chairman of the Global Child Dental Fund and was previously Chief Dental Officer in England, i.e. the most senior advisor on dentistry in each of the four UK governments and head of the dental profession.

Since 2012 Raman has been the founding chair of the oral health working group of the World Federation of Public Health Associations, which raises the importance of oral health issues affecting global public health. He is a practicing specialist, focusing exclusively on the comprehensive oral rehabilitation of young children. He was a consultant to the NHS in pediatric dentistry from 1991 to 2005 and is on the General Dental Council's list of specialists in pediatric dentistry and dental public health. He is a consultant to WHO on curriculum development in the field of patient safety and dentistry, and was co-chair of the World Expert Committee on the management and prevention of dental caries. Recently, he was asked by WHO to review dental services in Oman.

Raman served as head of dental public health at the Eastman Dental Institute at University College London and director of the National Centre for Transcultural Oral Health. He was also co-director of the World Health Organization Collaborating Centre at the Eastman Dental Institute. He is currently professor emeritus at King's College London. He is one of the few researchers to have been awarded a Doctor of Science degree by the University of Bristol (2003) for his contribution to dental research and a Doctor of Humane Letters degree (2010) by AT Still University (Arizona) for his scholarly contribution to the social sciences.



## Dr. Bedi, Raman

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- Professor Emeritus of King's College London.
- Formerly Director of Dentistry England.
- Extraordinary Professor of Pediatric Dentistry at the University of the Western Cape, South Africa
- Adjunct Professor at the University of Pennsylvania
- Doctor of Dental Surgery, University of Bristol
- Doctor of Humane Letters from AT Still, U.S.A.
- Doctor of Science, University of Bristol
- Honorary Fellow of Dental Surgery of the Royal College of Physicians and Surgeons of Glasgow
- Honorary Fellow of the Faculty of Public Health, UK.

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*Thanks to TECH, you will be able to learn with the best professionals in the world”*

## Professors

### Dr. Del Campo Rodríguez, Angel

- ◆ Specialist in Pediatric Dentistry and Preventive and Interceptive Orthodontics
- ◆ Ad Honorem collaborating professor in the Master of Aesthetic, Adhesive and Minimally Invasive Dentistry at the Lluís Alcanyis Foundation Dental Clinic, University of Valencia
- ◆ Member of the American Academy of Pediatric Dentistry
- ◆ Member of the Spanish Society of Pediatric Dentistry
- ◆ PhD in Dentistry from the University of Valencia
- ◆ Degree in Dentistry from the Intercontinental University of Mexico City
- ◆ Postgraduate degree in Pediatric Dentistry from New York University College of Dentistry
- ◆ Master in Gestalt Therapy and Diploma in Child and Adolescent Gestalt Therapy from the Gestalt Therapy Institute of Valencia

### Dr. González Aranda, Cristina

- ◆ Degree in Dentistry. Complutense University of Madrid
- ◆ PhD in Dentistry Complutense University of Madrid
- ◆ Master's Degree in Pediatric Dentistry. Complutense University of Madrid
- ◆ Master's Degree in Dental Sciences. Complutense University of Madrid
- ◆ Collaborating Professor of the Master's Degree in Pediatric Dentistry. Faculty of Dentistry, Complutense University of Madrid
- ◆ Associate Professor in Pediatric Dentistry. Faculty of Dentistry at the Complutense University of Madrid
- ◆ Exclusive private practice in pediatric dentistry in Madrid (Spain)

### Dr. García Márquez, Juan Eliseo

- ◆ Degree in Dentistry Faculty of Medicine and Dentistry, University of Valencia. Valencia, Spain
- ◆ Master's Degree in Dentistry in special patients. University of Valencia. Dr. Peset Aleixandre hospital. Valencia, Spain
- ◆ Master's Degree in Hospital Surgery. University of Valencia. General University Hospital, Valencia, Spain
- ◆ Diploma in Periodontics. Faculty of Medicine and Dentistry, University of Valencia, Spain
- ◆ Former Associate Professor Master's Degree in Dentistry in Special Patients. University of Valencia. Valencia, Spain
- ◆ Full professor of Special Patients. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU University, Moncada, Valencia, Spain
- ◆ Associate Professor of Periodontics. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU University, Moncada, Valencia, Spain
- ◆ Collaborating professor in Master's Degree in Oral Surgery and Implantology Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ◆ Member of the Spanish Society of Odontostomatology for patients with special needs (SEOENE)
- ◆ Member of the Spanish Society of Periodontology and Osseointegration (SEPA).
- ◆ Private practice with exclusive dedication in Oral Surgery, Periodontics, Implants and Special Patients.

### Dr. Barreda Ramos, Isai

- ◆ Dental Surgeon, Popular Autonomous University of the State of Puebla (UAEP).
- ◆ Specialty in Orthodontics, UNITEC
- ◆ Research Award 2003 by the Mexican Association of Orthodontics (AMO).

**Dr. Figueroa García, Angela**

- ◆ Degree in Dentistry, Los Andes University, Merida, Venezuela
- ◆ Master in Periodontics, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ◆ Doctor in Dentistry, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ◆ Undergraduate and postgraduate collaborating professor at the Department of Periodontology, Faculty of Medicine and Dentistry, Universities of Valencia, Spain
- ◆ Associate Professor of Advanced Periodontics, European University of Valencia, Spain

**Dr. Enciso Ripoll, Manuel Jesús**

- ◆ Assistant dentist at the Hospital de Manises, in Valencia, Spain.
- ◆ Degree in Dentistry from the University of Valencia
- ◆ Degree in Veterinary Medicine at the Cardenal-Herrera CEU University
- ◆ Diploma of Advanced Studies in the Program in Human Tumor Pathology at the University of Valencia
- ◆ Master's Degree in Molecular Oncology by the National Cancer Research Center and the European School of Oncology
- ◆ Official Master's Degree in Health Management from the Catholic University of Valencia
- ◆ Master's Degree in Individual and Community Clinical Dentistry at the University of Valencia
- ◆ Associate Professor of Oral Medicine. Prosthesis III Minimally Invasive Dentistry, Legal and Forensic Dentistry Faculty of Experimental and Health Sciences, CEU Cardenal-Herrera University, Moncada, Valencia, Spain
- ◆ Member of SEOP, SESPO, SEPA and SECIB

**Dr. Lozano Pajares, Melanie**

- ◆ Degree in Dentistry. Central University of Venezuela. Caracas, Venezuela
- ◆ Degree in Dentistry. Degree from the European University of Valencia
- ◆ Degree in Dentistry. European University of Valencia. Valencia, Spain
- ◆ Diploma in Pediatric Dentistry. Advanced training in Minimally Interventionist Multidisciplinary Dentistry. Barcelona, Spain
- ◆ Course on Conscious sedation in Dentistry. YaCare institute. Valencia, Spain
- ◆ Certification from Invisalign, Invisalign Essentials course in Madrid, Spain
- ◆ Member of the Spanish Society of Pediatric Dentistry
- ◆ Communications and presentations in different courses and congresses at national level.
- ◆ Exclusive private practice in Pediatric Dentistry with specialized attention in special patients with the use of Nitrous Oxide Sedation or anxiolysis

**Dr. Gatón Hernández, Patricia**

- ◆ PhD in Dentistry, International University of Catalonia, Spain.
- ◆ Postgraduate Course in Pediatric Dentistry, Pediatric Hospital of Barcelona
- ◆ Postgraduate in Aesthetic Dentistry University of Barcelona
- ◆ Director of Academic Course by modules in Pediatric Dentistry
- ◆ Associate Professor at Barcelona University
- ◆ Guest Professor University of Sao Paulo, Brazil
- ◆ Member of the European Board of Minimum Intervention Dentistry
- ◆ Frequent lecturer of courses on Restorative and Aesthetic Dentistry, Pediatric Dentistry and Dental Materials at national and international level
- ◆ Director of Advanced Training in Multidisciplinary Minor Interventional Dentistry. Barcelona, Spain



**Dr. Serrano Martínez, Concepción**

- ◆ Degree in Medicine and General Surgery. Murcia University. Spain
- ◆ Specialist in Stomatology. Murcia University. Spain
- ◆ Postgraduate Course in Dentistry for the special and medically compromised patient. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ PhD in Medicine and General Surgery. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ National reference specialist. DEBRA Spain Association, for dental care in patients with epidermolysis bullosa
- ◆ Private practice in general dentistry

**Dr. Gianni, Manfredi**

- ◆ Degree in Dentistry. European University of Valencia. Spain
- ◆ Master's Degree in Pediatric Dentistry. San Vicente Mártir Catholic University Spain
- ◆ Official Master's Degree in Advanced Orthodontics European University of Valencia. Spain
- ◆ Certificate of conscious sedation and basic instrumental cardiopulmonary resuscitation San Vicente Mártir Catholic University Spain
- ◆ Refresher course on dental care guidelines for patients with special needs Sant Joan de Déu hospital. Barcelona: Spain
- ◆ Associate Professor of Orthodontics at undergraduate and postgraduate levels European University of Valencia
- ◆ Professor of Pediatric Dentistry at Postgraduate level San Vicente Mártir Catholic University Spain
- ◆ Oral communication at the 36th, 38th, 39th Annual Meeting of the Spanish Society of Pediatric Dentistry (SEOP)
- ◆ Exclusive private practice in Pediatric Dentistry and Orthodontics





**Dr. Haya Fernández, Maria Celia**

- ◆ Private practice in general dentistry
- ◆ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ PhD in Dentistry Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Master's Degree in Oral Medicine. General University Hospital University of Valencia. Spain
- ◆ Master's Degree in Health Education for Patients and Dependent People. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Course on Pedagogical Adaptation. University of Valencia. Spain
- ◆ Professor of Gerodontology and Oral Medicine. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ◆ Member of the Spanish Society of Oral Medicine, the Spanish Society of Gerodontology and the Center for Dental Studies of Valencia

**Dr. Pérez Chicote, Víctor**

- ◆ Degree in Dentistry 95 -00 at the University of Valencia
- ◆ Cum Laude Doctor in Dentistry from the University of Valencia
- ◆ Master's Degree in Dentistry in Special Patients. University of Valencia
- ◆ Master's Degree in Oral Implantology and Rehabilitation E.S.O.R.I.B
- ◆ University Diploma in Implantology and Maxillofacial Surgery. Fac. de Créteil, Paris
- ◆ Master's Degree in Dental Sciences University of Valencia
- ◆ Postgraduate course in Oral Surgery and Implantology at Univ. of Santa Clara, Cuba
- ◆ Postgraduate course in Advanced Surgery and Zygomatic Implants in Maringá -Brazil
- ◆ Member of SEI
- ◆ Experience: private practice in Valencia since 2000 and teaching training courses in oral surgery and Implantology in a private clinic.

**Dr. López Zamora, Maria Isabel**

- ◆ Exclusive private practice of Pediatric Dentistry
- ◆ Degree in Dentistry. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ◆ Master's Degree in Comprehensive Pediatric Dentistry. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ◆ Master's Degree in Pediatric Dentistry at the CEU Cardenal Herrera University. Moncada, Valencia, Spain
- ◆ Course on Conscious sedation and Advanced life support for dentistry. InsvaCare training center. Paterna, Valencia
- ◆ Course on aesthetic pediatric crowns taught by NuSmile
- ◆ Oral communications at congresses of the Spanish Society of Pediatric Dentistry (SEOP)

**Dr. Manzano, Alberto**

- ◆ Degree in Dentistry Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Master's Degree in Dental Pathology and Therapeutics. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ University Diploma in Implantology and Oral Rehabilitation. Paris XII University. Faculty of Medicine. Paris France
- ◆ Doctor in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Executive Program in Management and Marketing for Dental Clinics. E-Universitas
- ◆ Professor in charge of the Endodontics course for the international group at the European University of Valencia
- ◆ Director of the postgraduate course in Management and Direction of Dental Clinics of Plan Synergia
- ◆ Lecturer of courses on Management and Marketing for dental clinics nationwide

**Dr. Leyda Menéndez, Ana**

- ◆ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Postgraduate Course in Dentistry for special patients: Physically and mentally disabled patients and medically compromised patients". Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Postgraduate Course in Pediatric Dentistry. Faculty of Health Sciences. Scientific University of the South. Lima Peru
- ◆ Postgraduate Course in Pediatric Dentistry. Cayetano Heredia Peruvian University Lima Peru.
- ◆ Doctor in Dentistry, Faculty of Medicine and Dentistry, University of Valencia Spain
- ◆ Associate Professor of the Master's Degree in Comprehensive Pediatric Dentistry. Faculty of Dentistry, CEU - Cardenal Herrera University. Alfara del Patriarca. Valencia Spain
- ◆ Contract pediatric dentist, Clinic of Dentistry, Faculty of Dentistry of the CEU - Cardenal Herrera University. Alfara del Patriarca. Valencia Spain
- ◆ National and International Lecturer
- ◆ Exclusive Practice in Pediatric Dentistry

**Dr. Mut Ronda, Salvador**

- ◆ Active pharmacist in a Pharmacy
- ◆ Degree in Pharmacy from the University of Valencia
- ◆ PhD in Pharmacy from the University of Valencia
- ◆ Expert course in Biomedical English at the European University of Valencia
- ◆ Associate Professor of General Pharmacology, Anesthesia, Resuscitation; Human Nutrition and General Pathology I and II (Spanish and English degree) at the Faculty of Health Sciences, Department of Dentistry of the European University of Valencia
- ◆ Author of several publications
- ◆ Director of Undergraduate Final Projects
- ◆ Participation in various specialized training programs in pharmacology.

**Dr. Ureña Cirret, Jose Luis**

- ◆ Master of Science. (M.S.) Pediatric Dentistry. University of Michigan, Ann Harbor, Mi. USA
- ◆ Dental Surgeon, National Autonomous University of Mexico, Mexico City, Mexico
- ◆ Mini-residency in adhesive materials. University of Minnesota. Minneapolis, MN. USA
- ◆ Postgraduate Professor of Pediatric Dentistry, Technological University of México (UNITEC), Mexico City, Mexico
- ◆ Professor of the Degree in Pediatric Dentistry. Faculty of Dentistry, Intercontinental University (UIC), Mexico City, Mexico
- ◆ Visiting Professor at the Faculty of Dentistry Autonomous University of Tamaulipas, Tampico, Tamps. Mexico
- ◆ Former Director of the Faculty of Dentistry. Faculty of Dentistry, Intercontinental University (UIC), Mexico City, Mexico
- ◆ Representative of the Mexican Dental Association (ADM) in the program for the accreditation of dental degree programs

**Dr. Negre Barber, Adela**

- ◆ Private practice in general dentistry
- ◆ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ PhD in Dentistry Outstanding Cum Laude. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Master's Degree in Dental Sciences. Faculty of Medicine and Dentistry, University of Valencia. Valencia, Spain
- ◆ Master's Degree in Individual and Community Clinical Dentistry. Faculty of Medicine and Dentistry, University of Valencia. University-Company foundation (ADEIT). Valencia, Spain
- ◆ Author of several scientific articles in impact journals
- ◆ Communications in several Conferences (SESPO, SEOP)
- ◆ Best Novel Communication Award SEOP 2015



**Dr. Melo Almiñana, Maria Pilar**

- ◆ Private practice in Comprehensive dentistry
- ◆ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ PhD in Dentistry Outstanding Cum Laude. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Master's Degree in Aesthetic Dentistry Faculty of Medicine and Dentistry, University of Valencia. University-Company foundation (ADEIT). Valencia, Spain
- ◆ Master's Degree in Forensic sciences. Faculty of Medicine and Dentistry, University of Valencia. University-Company foundation (ADEIT). Valencia, Spain
- ◆ Biomaterials teacher, Spanish and English degree. European University of Valencia. Valencia, Spain
- ◆ Associate Professor of Dental Pathology and Therapeutics. Faculty of Medicine and Dentistry, University of Valencia. Valencia, Spain
- ◆ Publication of several scientific articles in JCR journals

**Dr. Segarra Ortells, Cristina**

- ◆ Specialist in Dentistry

**Dr. Cargill Foster, Nelly Ruth**

- ◆ Specialist in Dentistry

**Dña. Limonchi Palacio, Landy Vianey**

- ◆ Specialist in Dentistry

**Dr. Savall Orts, Maria**

- ◆ Degree in Dentistry, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ◆ Master's Degree in Oral Medicine and Surgery, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ◆ Master in Aesthetic, Adhesive and Minimally Invasive Dentistry, University of Valencia, Faculty of Medicine and Dentistry, University of Valencia, Spain
- ◆ Postgraduate course in Occlusion, Temporomandibular Dysfunction and Orofacial Pain by the Catalan Society of Odontology and Stomatology (SCOE)
- ◆ Ad Honorem Adhesive and Minimally Invasive Aesthetic Dentistry Master, Dental Clinic Lluís Alcanyis Foundation, University of Valencia, Valencia, Spain
- ◆ Private practice in General Dentistry specializing in Oral Medicine and Aesthetic Dentistry

**Dr. Cruz Pamplona, Marta**

- ◆ Degree in Dentistry. Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ◆ Master's Degree in Medicine and Oral Surgery Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Diploma in Oral Medicine, General University Hospital Consortium in Valencia. Spain
- ◆ Associate Professor of Oral Medicine (international degree) (CEU-Cardenal Herrera University), Moncada, Valencia. Spain
- ◆ Professor of the degree in Dentistry (regular degree and international degree) at the European University of Valencia, Valencia, Spain
- ◆ Professor of Adult and Child Clinical Practice" at the European University of Valencia, Valencia, Spain.
- ◆ Author of several research papers, publications and oral communications.
- ◆ Private clinical practice of general dentistry

**Dr. Muwaquet Rodríguez, Susana**

- ◆ Degree in Dentistry. University of Granada
- ◆ Master's Degree in Clinical and Microscopic Endodontics. Murcia Catholic University
- ◆ Master's Degree in Forensic Medicine. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Expert degree in surgery and prosthesis on implants at the European Center of Orthodontics (CEOSA)
- ◆ PhD in Dentistry University of Granada. Granada, Spain
- ◆ Associate Professor at the European University of Valencia. International Line. Valencia, Spain
- ◆ Member of the Spanish Association of Endodontics (AEDE)
- ◆ Member of the Spanish Society of Conservative and Esthetic Dentistry (SEOC)
- ◆ Spanish Society of Periodontics and Osseointegration (SEPA)
- ◆ Speaker and lecturer of courses at national and international level
- ◆ Author of several article papers, posters and communications
- ◆ Private Clinical Practice

**Dr. Palma Carrió, Cristina**

- ◆ Doctor at the University of Valladolid
- ◆ Diploma in Diagnosis and SEPA Foundation (Madrid)
- ◆ Periodontal treatment
- ◆ Diploma in Rotational and Microscopic Endodontics University of Valencia
- ◆ Master's Degree in Oral Surgery and Implantology University of Valencia
- ◆ Degree in Dentistry University of Valencia
- ◆ Intern in the Department of Oral Surgery during the 5th year

**Dr. Saavedra Marbán, Gloria**

- ◆ Degree in Dentistry. Complutense University of Madrid, Spain
- ◆ Master's Degree in Pediatric Dentistry. Complutense University of Madrid, Spain
- ◆ Specialist in Dental Care for children at high biological risk. Complutense University of Madrid. Spain
- ◆ PhD in Dentistry Complutense University of Madrid, Spain
- ◆ Professor at the Master's Degree in Pediatric Dentistry. Complutense University of Madrid, Spain
- ◆ Associate Professor of the Department of Stomatology IV of the Faculty of Dentistry, Complutense University of Madrid, Spain
- ◆ Member of the Pediatric Dentistry Scientific Commission of the Illustrious College of Dentists and Stomatologists of the I Region
- ◆ Private Practice in Pediatric Dentistry

**Dr. Sastriques Mateu, Cristina**

- ◆ Degree in Dentistry. Faculty of Medicine and Dentistry, University of Valencia. Spain
- ◆ Master's Degree in Endodontics Faculty of Experimental and Health Sciences, Cardenal - Herrera CEU, Moncada, Valencia, Spain
- ◆ Postgraduate course in Implantology and Basic Oral Surgery, Coppel Doctors. Rubber Clinic. Madrid, Spain
- ◆ Expert Degree in Endodontics and Restorative Dentistry. Dr. Hipólito Fabra Clinic Valencia, Spain
- ◆ Conscious Sedation Course. Dentist Council of Barcelona Spain
- ◆ Professor of Pediatric Dentistry. European University of Valencia
- ◆ Member of the Spanish Association of Endodontics (AEDE)
- ◆ Author of Communications and Posters in several Conferences
- ◆ Private Practice in Endodontics and Pediatric Dentistry

**Dr. Ramírez Mendoza, Jeannette**

- ◆ Dentist surgeon. Juárez Autonomous University of Tabasco, Villahermosa, Tabasco, Mexico
- ◆ Specialist in Pediatric Dentistry. Juárez Autonomous University of Tabasco. Villahermosa, Tabasco, México
- ◆ Specialist in Dentistry. Mexican Dentistry Association for Teaching and Research
- ◆ Diploma in Dentofacial Orthopedics, AOMEI. Mexico City, Mexico
- ◆ Master's Degree in Medical Education. Higher Institute in Medical Sciences of La Habana, Habana, Cuba
- ◆ Doctor in Education. Iberoamerican University Foundation
- ◆ Diploma in Emotional Intelligence. Center for Human Development- Juárez Autonomous University of Tabasco (CSUM-UJAT), Villahermosa, Tabasco, Mexico
- ◆ Research Professor of the Postgraduate Course in Orthodontics and Pediatric Dentistry. Juárez Autonomous University of Tabasco. Villahermosa, Tabasco, México
- ◆ Certification and Recertification. National Council of Children's Dentistry and National Council of Orthodontics of Mexico
- ◆ Exclusive consultation for Babies, Children and Adolescents



*Take the step to get up to date on the latest developments in Pediatric Preventive and Interceptive Orthodontics"*



# 04

## Structure and Content

The syllabus of this Postgraduate Diploma has been prepared by an experienced teaching team specialized in Pediatric Dentistry. Their extensive knowledge in the field of pediatric preventive and interceptive orthodontics is reflected throughout the 4 modules that make up this program. With a library of multimedia resources, simulations of real clinical cases and complementary readings, the dental professional will be able to update their knowledge. In addition, students have the complete syllabus at their disposal from the beginning, which will allow them to distribute the teaching load according to their needs.







“

*Access 24 hours a day to the multimedia resource library of this teaching and update your knowledge in clinical exploration”*

## Module 1. Pediatric Dentistry: Basics

- 1.1. Introduction to Pediatric Dentistry
  - 1.1.1. What is Pediatric Dentistry and What is the Role of the Pediatric Dentist in Today's Dentistry?
  - 1.1.2. Vision and Objectives of the Pediatric Dentist
  - 1.1.3. Historic Evolution of Pediatric Dentistry
  - 1.1.4. Comprehensive Care of the Pediatric Patient
  - 1.1.5. Differences Between Pediatric Dentistry and Other Dental Specialities. Differences between Pediatric and Adult Patients
  - 1.1.6. Characteristics of an "Ideal" Pediatric Dentist and the Future Challenges of Pediatric Dental Care
- 1.2. Clinical Examination in Pediatric Dentistry
  - 1.2.1. First Visit in Pediatric Dentistry: Objectives, Requirements and Tools
  - 1.2.2. Medical History: Objective, Fundamentals and Structure
  - 1.2.3. Clinical Examination: Objective, Characteristics and Structure
  - 1.2.4. Extraoral Clinical Examination
  - 1.2.5. Intraoral Clinical Examination
  - 1.2.6. Oral Hygiene Evaluation
  - 1.2.7. Diet Evaluation
- 1.3. Radiological Examination and Complementary Tests
  - 1.3.1. Radiological Tests
    - 1.3.1.1. Advantages Types
    - 1.3.1.2. Extraoral X-Rays: Lateral Skull Orthopantomography, Wrist X-ray: Objectives
    - 1.3.1.3. Advantages Indicated Time of Execution and Disadvantages
    - 1.3.1.4. Intraoral X-Rays. Bitewing, Periapical and Occlusal X-Rays: Objectives, Indications, Advantages, Disadvantages and Materials Criteria: Age and Risk of Caries
  - 1.3.2. Complementary Tests
    - 1.3.2.1. Laboratory Tests: Usefulness
    - 1.3.2.2. Study Models: Indications
    - 1.3.2.3. Clinical Images: Advantages



- 1.4. Diagnosis and Treatment Plan
  - 1.4.1. The Diagnostic Process. Concept
  - 1.4.2. Information: Need and Requirement
  - 1.4.3. Provisional Diagnosis, Differential Diagnosis and Definitive Diagnosis
  - 1.4.4. Therapeutic Process: Objectives
  - 1.4.5. Adequate Treatment: Rationale, Requirements, Objectives and Phases
    - 1.4.5.1. Immediate Phase (Urgent Measures)
    - 1.4.5.2. Systemic Phase (Medical Alerts)
    - 1.4.5.3. Preparatory Phase (Preventive Measures)
    - 1.4.5.4. Corrective Phase (Operative Dentistry)
    - 1.4.5.5. Maintenance Phase
    - 1.4.5.6. Schedule or Appointment-Based Planning: Importance
- 1.5. Chronology and Morphology of Primary and Permanent Dentition, Eruption and Dental Occlusion
  - 1.5.1. Chronology of Human Dentition. Importance
  - 1.5.2. Nolla's Phases of Dental Development
  - 1.5.3. Morphology of Temporary Dentition. Importance Features
  - 1.5.4. Differences Between Temporary (TT) and Permanent Teeth (PT)
  - 1.5.5. General Characteristics of the Temporal Incisor Group
  - 1.5.6. Clinical Repercussions of the Differences Between TT and PT
  - 1.5.7. General Characteristics of the Temporal Canine Group
  - 1.5.8. General Characteristics of the Temporal Molar Group
- 1.6. Nomenclature and Dental Identification Systems
  - 1.6.1. Introduction
  - 1.6.2. Guide for the Identification of Teeth. Shape and Color, Presence of Mamelons, Eruption Status, Chronological Age and History of Premature Extractions
  - 1.6.3. Primary and Permanent Dentition Nomenclature
  - 1.6.4. Dental Identification Systems
    - 1.6.4.1. International System or FDI
    - 1.6.4.2. Universal or American System
    - 1.6.4.3. Zsigmondy or Palmer System
    - 1.6.4.4. Haderup or German System

## Module 2. Growth and Development: Changes in Orofacial Structures and Associated Pathologies

- 2.1. Growth and Development
  - 2.1.1. Introduction
  - 2.1.2. Definitions and Fundamentals of Growth and Development
    - 2.1.2.1. Prenatal Growth
    - 2.1.2.2. Postnatal Growth
    - 2.1.2.3. Factors That Impact Growth and Development
    - 2.1.2.4. Theories of Growth and Development
    - 2.1.2.5. Basic Concepts of General and Craniofacial Growth
    - 2.1.2.6. Development of the Maxilla
    - 2.1.2.7. Jaw Development
    - 2.1.2.8. Growth and Development of the Dental Arches. Primary Dentition Stages, Mixed Dentition Stages, Anterior Replacement, Lateral Replacement. Dimensional Changes of the Arches
    - 2.1.2.9. Differential Human Growth. Krogman's Childhood Ages, Growth Markers, Growth Acceleration (Spikes) and Growth Assessment Methods and Their Importance in Pediatric Dentistry
- 2.2. Dentition Development, Eruption, Exfoliation and Occlusion of Teeth
  - 2.2.1. Introduction. Dental Development. Odontogenesis
  - 2.2.2. Stages of Dental Development
    - 2.2.2.1. Stages of Morphological Development
    - 2.2.2.2. Stages of Histophysiological Development
  - 2.2.3. Dental Eruption and Exfoliation
    - 2.2.3.1. Concepts and Theories of Eruption
    - 2.2.3.2. Stages of Eruption: Pre- Eruptive/ Eruptive/Pre-Functional and Post-Eruptive/Functional Eruption
    - 2.2.3.3. Dental Exfoliation
  - 2.2.4. Clinical Problems During Dental Eruption
    - 2.2.4.1. Eruption of the First Teeth, "Teething", and Their Management
    - 2.2.4.2. Natal and Neonatal Teeth
    - 2.2.4.3. Other Oral Lesions Connected to Eruption
      - 2.2.4.3.1. Factors Affecting Dentition Development. Local and Systemic Factors

- 2.2.5. Occlusion Development
  - 2.2.5.1. Characteristics and Different Stages
  - 2.2.5.2. Gingival Flange
  - 2.2.5.3. Occlusion in Primary Dentition
  - 2.2.5.4. Occlusion in Mixed Dentition
  - 2.2.5.5. Occlusion in Permanent Dentition
- 2.3. Tooth Development Abnormalities
  - 2.3.1. Shape and Number Abnormalities
    - 2.3.1.1. Introduction
    - 2.3.1.2. Tooth Number Abnormalities: Concept
    - 2.3.1.3. Dental Agenesis: Etiology and Manifestations
    - 2.3.1.4. Clinics, Diagnosis and Therapeutic Options
    - 2.3.1.5. Supernumerary Teeth: Etiology and Manifestations
    - 2.3.1.6. Clinics, Diagnosis and Therapeutic Options
    - 2.3.1.7. Local Morphological Alterations: Regional Odontodysplasia, Macrodontia and Microdontia, Gemmation, Fusion, Cusps and Accessory Tubercles, Dens in Dente and Taurodontism
  - 2.3.2. Enamel Structure Disorders
    - 2.3.2.1. Enamel. Nature
    - 2.3.2.2. Histology of Healthy Enamel
    - 2.3.2.3. Amelogenesis
  - 2.3.3. Enamel Disorders as a Syndromic Feature
  - 2.3.4. Genetic Dysplasias: Amelogenesis Imperfecta. Generalities and Types
    - 2.3.4.1. AI Type I Hypoplastic
    - 2.3.4.2. AI Type II Hypomaturative
    - 2.3.4.3. AI Type III Hypocalcified
    - 2.3.4.4. AI Type IV Hypomaturative-Hypoplastic With Taurodontism
  - 2.3.5. Environmental Dysplasias
    - 2.3.5.1. Hypoplasia Due to Fluoride Ingestion
    - 2.3.5.2. Hypoplasia Due to Nutritional Deficits
    - 2.3.5.3. Hypoplasias Due to Exanthematous Diseases
    - 2.3.5.4. Hypoplasias Due to Prenatal Infections
    - 2.3.5.5. Hypoplasias Due to Neuropathies
    - 2.3.5.6. Hypoplasias Due to Inborn Errors of Metabolism
- 2.3.6. Hypoplasias Due to Local Factors: Apical Infection, Trauma, Surgery, Irradiation
- 2.3.7. Treating Hypoplastic Teeth
- 2.4. Incisor-Molar Hypomineralization (IMH). Etiology and Diagnosis
  - 2.4.1. The Concept of Incisor-Molar Hypomineralization
  - 2.4.2. Histological Features of Hypomineralized Enamel
  - 2.4.3. The Tissues Under Hypomineralized Enamel: Dentin-Pulp Complex
  - 2.4.4. Etiological Factors
    - 2.4.4.1. Genetic and Ethnic Factors
  - 2.4.5. Environmental Factors
    - 2.4.5.1. Hypoxia
    - 2.4.5.2. Hypocalcemia
    - 2.4.5.3. Hypokalemia
    - 2.4.5.4. High Fever
    - 2.4.5.5. Drugs:
    - 2.4.5.6. Environmental Toxicity
    - 2.4.5.7. Breastfeeding
    - 2.4.5.8. Fluoride
    - 2.4.5.9. Others
  - 2.4.6. Influence of the Period of Action of the Causative Agent on the Development of Incisor-Molar Hypomineralization
  - 2.4.7. Clinical Manifestations
    - 2.4.7.1. Pattern of Affectation
    - 2.4.7.2. Diagnostic Criteria
    - 2.4.7.3. Associated Clinical Problems
  - 2.4.8. Differential Diagnosis
  - 2.4.9. Severity Criteria
  - 2.4.10. Epidemiological Analysis
- 2.5. Incisor-Molar Hypomineralization (IMH). Prevention and Treatment.
  - 2.5.1. Prevention
    - 2.5.1.1. Dietary and Oral Hygiene Recommendations
    - 2.5.1.2. Early Diagnosis
    - 2.5.1.3. Remineralization and Desensitization
    - 2.5.1.4. Pit and Fissure Sealants

- 2.5.2. Restorative Treatment
  - 2.5.2.1. Treatment of Enamel Opacities in Incisors
  - 2.5.2.2. Restorative and Prosthetic Treatment of Molar Teeth
  - 2.5.2.3. General Aspects of Cavity Preparation
  - 2.5.2.4. Molar Restoration
  - 2.5.2.5. Difficulties Treating Teeth With IMH
  - 2.5.2.6. Causes and Consequences of Bonding Difficulties in Enamel and Dentin
- 2.5.3. Exodontics
- 2.5.4. Affected Behavior in Patients with Previous Experience of Pain
- 2.6. Dentin Structure Abnormalities
  - 2.6.1. Introduction
  - 2.6.2. Dentin Alterations as a Syndromic Element: Familial Hypophosphatemic Rickets, Pseudohypoparathyroidism, Other Syndromes
  - 2.6.3. Genetic Dysplasias
    - 2.6.3.1. Dentinogenesis Imperfecta: Classification: Shields Type I, II and III.
    - 2.6.3.2. Dentin Dysplasia: Classification: Shields Type I, II and III
  - 2.6.4. Treating Hypoplastic Teeth
- 2.7. Eruption Abnormalities
  - 2.7.1. Introduction
  - 2.7.2. Natal and Neonatal Teeth
  - 2.7.3. Development Cysts
  - 2.7.4. Early Eruption. Late Eruption
  - 2.7.5. Premature Loss of Primary Teeth
  - 2.7.6. Ectopic Eruption
  - 2.7.7. Dental Ankylosis
  - 2.7.8. Failure of Permanent Teeth to Erupt
- 2.8. Dental Erosion in Children
  - 2.8.1. Concept
  - 2.8.2. Epidemiology of Dental Erosion
  - 2.8.3. Pathogenesis of Dental Erosion

- 2.8.4. Etiological Factors
  - 2.8.4.1. Biological Factors: Saliva and the Anatomy of the Hard and Soft Tissues of the Mouth
  - 2.8.4.2. Chemical Factors: Nature, Acidity, pH and Buffery Capacity, Adhesion and Mineral Content of Food
  - 2.8.4.3. Behavioral Factors: Daytime and Night-Time Food and Beverage Consumption, Vomiting, Regurgitation, and Intake of Medications and Oral Hygiene
  - 2.8.4.4. General Health Status of the Child
  - 2.8.4.5. Habits
  - 2.8.4.6. Education and Socioeconomic Level
  - 2.8.4.7. Knowledge on the Etiology of the Disease
- 2.8.5. Clinical Manifestations
- 2.8.6. Diagnosis of Dental Erosion
- 2.8.7. Differential Diagnosis of Dental Erosion

### Module 3. Preventive Pediatric Dentistry and Dental Caries

- 3.1. First Dental Visit
  - 3.1.1. Introduction
  - 3.1.2. Objectives of the First Dental Visit
  - 3.1.3. Preparing the Child for their First Dental Visit
  - 3.1.4. Dental Visit by Ages: Techniques and Suggestions
- 3.2. Oral Health of the Child and Anticipatory Guide for Parents and/or Tutors
  - 3.2.1. Risk Assessment: Definition and Tools
  - 3.2.2. Cambra Method
    - 3.2.2.1. Children Under the Age of 6
    - 3.2.2.2. Over the Age of 6
  - 3.2.3. "Dental Home". Concept
    - 3.2.3.1. Features
    - 3.2.3.2. Benefits



- 3.2.4. Anticipatory Guide for Parents
  - 3.2.4.1. Concept
  - 3.2.4.2. Oral Health Protocols for Babies
  - 3.2.4.3. Importance of Non-Dental Professionals in the Oral Health of Infants
- 3.3. Measures to Control Plaque in Pediatric Dentistry
  - 3.3.1. Introduction. Concept: Dental Plaque in Caries Etiology
  - 3.3.2. Mechanical Control of the Plaque
    - 3.3.2.1. Toothbrush. Characteristics and Techniques
    - 3.3.2.2. Toothpastes
    - 3.3.2.3. Dental Floss. Characteristics and Techniques
  - 3.3.3. Chemical Control of the Plaque
    - 3.3.3.1. Chemical Anti-Plaque Agents. Properties
  - 3.3.4. Preventive Oral Hygiene Measures for Children by Age
- 3.4. Dietary Measures and Nutrition in the Pediatric Patient
  - 3.4.1. Introduction. Nutrition in Child Dental Development
  - 3.4.2. Diet: Way of Feeding and Frequency of Intake, Factors of Dietary Cariogenicity. Protective Food
    - 3.4.2.1. Food Pyramid Guide
    - 3.4.2.2. Dietary Survey
    - 3.4.2.3. Balanced and Non-Cariogenic Diet
    - 3.4.2.4. Dietary Advice ("Counseling") in the Dental
    - 3.4.2.5. Clinic
- 3.5. Use of Fluorides in Pediatric Dentistry
  - 3.5.1. Introduction. Metabolism. Mechanisms of Action
    - 3.5.1.1. Systemic Fluoride. Fluoridation of Water and Other Sources. Advantages and Disadvantages
    - 3.5.1.2. Topical Fluoride: Mechanisms of Action, Types and Fluoride Products
    - 3.5.1.3. Acute Toxicity
    - 3.5.1.4. Chronic Toxicity. Dental Fluorosis
    - 3.5.1.5. Appropriate Prescription of Topical Fluoride According to Age and Risk of Caries
- 3.6. Dentistry for Babies
  - 3.6.1. Patients Under 3 Years of Age: Characteristics
  - 3.6.2. The Edentulous Baby's Mouth
    - 3.6.2.1. Constituent Elements and Functions
  - 3.6.3. Possible Findings
    - 3.6.3.1. Inclusion Cysts
    - 3.6.3.2. Microkeratocysts
    - 3.6.3.3. Geographic Tongue
    - 3.6.3.4. Natal and Neonatal Teeth
    - 3.6.3.5. Ankyloglossia
    - 3.6.3.6. Riga-Fede Syndrome
  - 3.6.4. Baby Dentistry: Concept, Rationale and Fundamentals
  - 3.6.5. The First Visit for a Child Under 3 Years of Age: Timing, Objectives and Constituent Elements
- 3.7. Maintenance of the Oral and Dental Health of Children Under 3 Years of Age
  - 3.7.1. Information: Type of Information and Methodology
  - 3.7.2. Transmission. Education
    - 3.7.2.1. Motivational Interviewing: Characteristics and Objectives
    - 3.7.2.2. Anticipatory Guide
  - 3.7.3. Preventive Strategies for Children Under the Age of 3
    - 3.7.3.1. Caring for the Oral Health of Parents
    - 3.7.3.2. Oral Hygiene
    - 3.7.3.3. Balanced Non-Cariogenic Diet
    - 3.7.3.4. Adequate Fluoride Intake
    - 3.7.3.5. Periodic Professional Monitoring

## Module 4. Pediatric Orthodontics

- 4.1. Preventive and Interceptive Orthodontics
  - 4.1.1. Introduction Concepts
  - 4.1.2. Diagnosis and Treatment Plan
  - 4.1.3. Classification of Malocclusions
  - 4.1.4. Crowding Management
    - 4.1.4.1. Serial Extractions
    - 4.1.4.2. Crossbites: Anterior and Posterior
    - 4.1.4.3. Diastemas
    - 4.1.4.4. Deep Bite
    - 4.1.4.5. Open Bites: Anterior and Posterior
    - 4.1.4.6. Pre-Orthodontic Trainers
    - 4.1.4.7. Ectopic Eruptions
    - 4.1.4.8. Treatment to Modify Growth
- 4.2. Space Management and Maintenance
  - 4.2.1. Factors Causing Loss of Space
  - 4.2.2. Premature Loss of Temporary Teeth
    - 4.2.2.1. Associated Problems
    - 4.2.2.2. Damping Factors
    - 4.2.2.3. Clinical Situations
  - 4.2.3. Space Maintenance
    - 4.2.3.1. Objective
    - 4.2.3.2. Requirements
    - 4.2.3.3. Procedures
    - 4.2.3.4. Factors to Consider
  - 4.2.4. Space Maintenance
    - 4.2.4.1. Concept
    - 4.2.4.2. Indications
    - 4.2.4.3. Contraindications
    - 4.2.4.4. Requirements
  - 4.2.5. Classification of Space Maintainers. Fixed Maintainers: Concept, Indications
    - 4.2.5.1. Advantages, Disadvantages and Types
    - 4.2.5.2. Removable Retainers: Concept, Indications, Advantages, Disadvantages and Types
  - 4.2.6. Clinical Situations
    - 4.2.6.1. Premature Loss of Incisors
    - 4.2.6.2. Premature Loss of Canines
    - 4.2.6.3. Premature Loss of Temporary Molars
    - 4.2.6.4. Multiple Losses
- 4.3. Oral Habits and Their Interceptive Treatment
  - 4.3.1. Habits
    - 4.3.1.1. Concept
    - 4.3.1.2. Types
    - 4.3.1.3. Classification
  - 4.3.2. Oral Habits
    - 4.3.2.1. Importance
    - 4.3.2.2. Consequences
    - 4.3.2.3. Prevention
    - 4.3.2.4. Professional Attitude
    - 4.3.2.5. Requirements
    - 4.3.2.6. Diagnosis. Medical History Clinical and Functional Examination
    - 4.3.2.7. Criteria for Treatment and Therapeutic Objectives
    - 4.3.2.8. Digital Sucking Habits: Types, Etiology, Consequences and Treatment
    - 4.3.2.9. Pacifier Suction: When Is it Harmful? Consequences and Treatment
    - 4.3.2.10. Atypical Swallowing: Etiology, Classification and Treatment
    - 4.3.2.11. Lip Suction
    - 4.3.2.12. Breathing through the Mouth
    - 4.3.2.13. Bruxism
    - 4.3.2.14. Onychophagia

# 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.





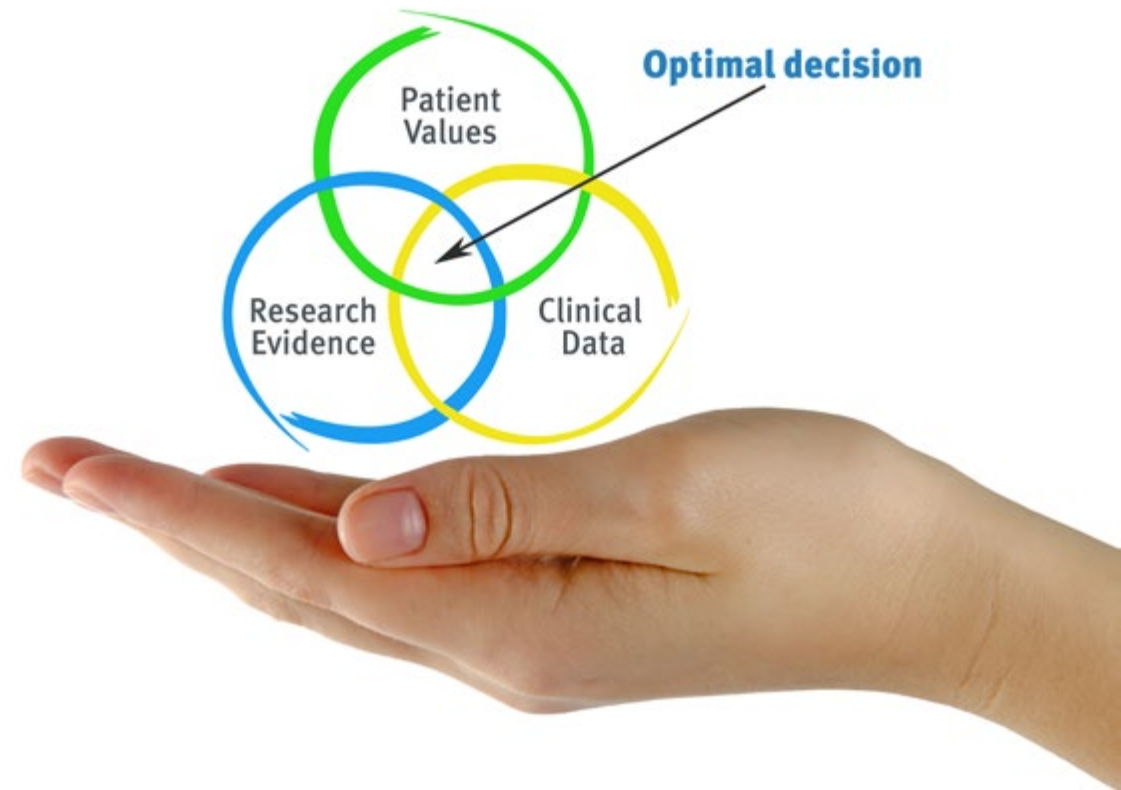
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

In a given situation, what should a professional do? 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. Gervas, 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 dentist'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. Dentists who follow this method not only grasp concepts, but also develop their mental capacity by means of exercises to evaluate real situations and apply their 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.

*The student will learn through real cases and by solving 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 we have trained more than 115,000 dentists with unprecedented success, in all specialties regardless of the workload. 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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.



### Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances, and to the forefront of 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 suggesting that observing third-party experts can be useful.

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 Pediatric Preventive and Interceptiv Orthodontics guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Diploma issued by TECH Global University.



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*Successfully complete this program  
and receive your university degree  
without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Diploma in Pediatric Preventive and Interceptive Orthodontics** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Postgraduate Diploma in Pediatric Preventive and Interceptive Orthodontics**

Modality: **online**

Duration: **6 months**

Accreditation: **20 ECTS**



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

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**Postgraduate Diploma**  
Pediatric Preventive and  
Interceptive Orthodontics

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 20 ECTS
- » Schedule: at your own pace
- » Exams: online



# Postgraduate Diploma

## Pediatric Preventive and Interceptive Orthodontics

