



## Postgraduate Certificate

## Treatment with Light Sources

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/treatment-light-sources

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### tech 06 | Introduction

Lasers are not only used to correct residual scars, but also to treat active cases of acne.

It is essential to know which type of laser is the most appropriate in each case. Depending on the wavelength, the beam will reach a greater or lesser depth and will be absorbed by one chromophore or another.

It should also be possible to determine the most suitable parameters to achieve optimal results with less risk of side effects.

An emerging treatment in recent years is biophotonic therapy. It consists of the application of a gel that, after being stimulated with light, emits fluorescence that will reduce inflammation and eliminate P acnes. It achieves very satisfactory results with an excellent safety profile.

Photodynamic therapy, so widely used in cutaneous oncology, is gaining new indications in inflammatory and infectious diseases, including acne.

A comprehensive compendium of knowledge that will cover these and other essential issues in the treatment of acne.

This **Postgraduate Certificate in Treatment with Light Sources** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- Development of a large number of case studies presented by experts
- Graphic, schematic, and highly practical contents
- The latest developments and cutting-edge advances in this area
- Practical exercises where the self-evaluation process can be carried out to improve learning
- Innovative and highly efficient 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



### Introduction | 07 tech



The latest advances in the field of Acne compiled in a highly efficient educational Postgraduate Certificate, which will optimize your effort with the best results"

The development of this program is focused on practicing the proposed theoretical learning Through the most effective teaching systems, proven methods imported from the most prestigious universities in the world, you will be able to acquire new knowledge in a practical way. In this way, we strive to convert your efforts into real and immediate skills.

Our online system is another of the strengths of our educational proposal With an interactive platform that has the advantages of the latest technological developments, we put the most interactive digital tools at your service. This way, we can offer you a learning method that can be completely adapted to your needs, so that you can perfectly combine this program with your personal or professional life.

All the necessary methodology for an effective approach in the field of Acne, in a specific and concrete Postgraduate Certificate.

A program designed to allow you to implement the knowledge that you acquire almost immediately in your daily practice.







## tech 10 | Objectives



### **General Objectives**

- Gain fully up-to-date knowledge of the different therapeutic options available for the treatment of acne
- Diagnose those cases of acne secondary to systemic pathologies or external agents that require specific management
- Know and be able to indicate and apply the different modalities of available physical therapies
- Know the paths of research and possible future directions of treatment
- Know how to treat obstinate cases resistant to the usual therapies
- Detect and anticipate possible complications and side effects of each treatment
- Be able to diagnose psychopathological alterations that are secondary to the disease itself or to treatments, which affect the patient's life in relationships and the fulfilment of the patient as a person
- Individualize the management of the aesthetic after-effects of acne, choosing and combining the best options from among the multiple techniques available





### Objectives | 11 tech



## **Specific Objectives**

- Indicate and configure the most suitable parameters for treatments with light sources
- Know the basics of biophotonic therapy and photodynamic therapy, as well as the most appropriate treatment guidelines in each case



An opportunity created for professionals who are looking for an intensive and effective course with which to take a significant step forward in their profession"





#### **International Guest Director**

Dr. Joshua Zeichner is an international eminence in the field of Dermatology and Cosmetic Medicine. In both fields he has based his professional career, acquiring the most advanced skills in care and for the development of empirical studies. Based on these skills of excellence, the expert has taken on challenges such as the position of Director of Cosmetic and Clinical Research in the Department of Dermatology at Mount Sinai Hospital in the United States.

He has also been awarded the prestigious Skin Genius Award by Elle magazine for his innovative approaches to the treatment of aging skin and faces. In turn, his peers have voted for his name to fill New York Magazine's Best Doctors lists since 2018. Also, he has had rankings as one of the Top Doctors in the New York Metropolitan Area by Castle Connolly and New York City Super Doctors, renowned catalogs that evidence Dr. Zeichner's dedication to his patients.

In addition to his medical knowledge and practice, often focused on Acne, this expert has therapeutically addressed other pathologies and general skin conditions. Among them, he has stood out for his comprehensive management of Eczema, Rosacea, Psoriasis and Cancer in different areas of the epidermis. At the same time, he has mastered the use of Botox and dermal fillers, as well as Laser and Chemical Peels.

Dr. Zeichner's opinion is also frequently used by the media. For this reason, his name has been mentioned many times in reports published by magazines and newspapers such as Allure, Vogue, Cosmopolitan, Elle, Glamour and The New York Times. Likewise, he regularly participates in congresses and lectures on Dermatology around the world.



## Dr. Zeichner, Joshua

- Director of Cosmetic and Clinical Research in Dermatology at Mount Sinai Hospital
- Specialist in Dermatologic Cosmetics, Acne Treatment and Anti-Aging Skin.
- Physician Consultant at Mount Sinai Beth Israel, Mount Sinai Brooklyn, Mount Sinai Queens and Mount Sinai West hospitals
- Officially Board Certified by the American Board of Dermatology
- Specialist Practitioner at St. Vincent Brooklyn Queens Catholic Medical Center
- John Hopkins University, M.D.
- Dermatology Residency and Dermopharmacology Fellowship at The Mount Sinai Hospital
- Graduate of the University of Pennsylvania



### tech 16 | Course Management

### Management



### Dr. Leis Dosil, Vicente Manuel

- Dermatologist at IDELIA Clinic
- Degree in Medicine and Surgery Faculty of Medicine and Dentistry University of Santiago de Compostela
- University Expert Certificate in Medical and Surgical Dermatology by the University of Alcalá de Henares
- University Expert certificate in Health Services Management through the UNED

### **Professors**

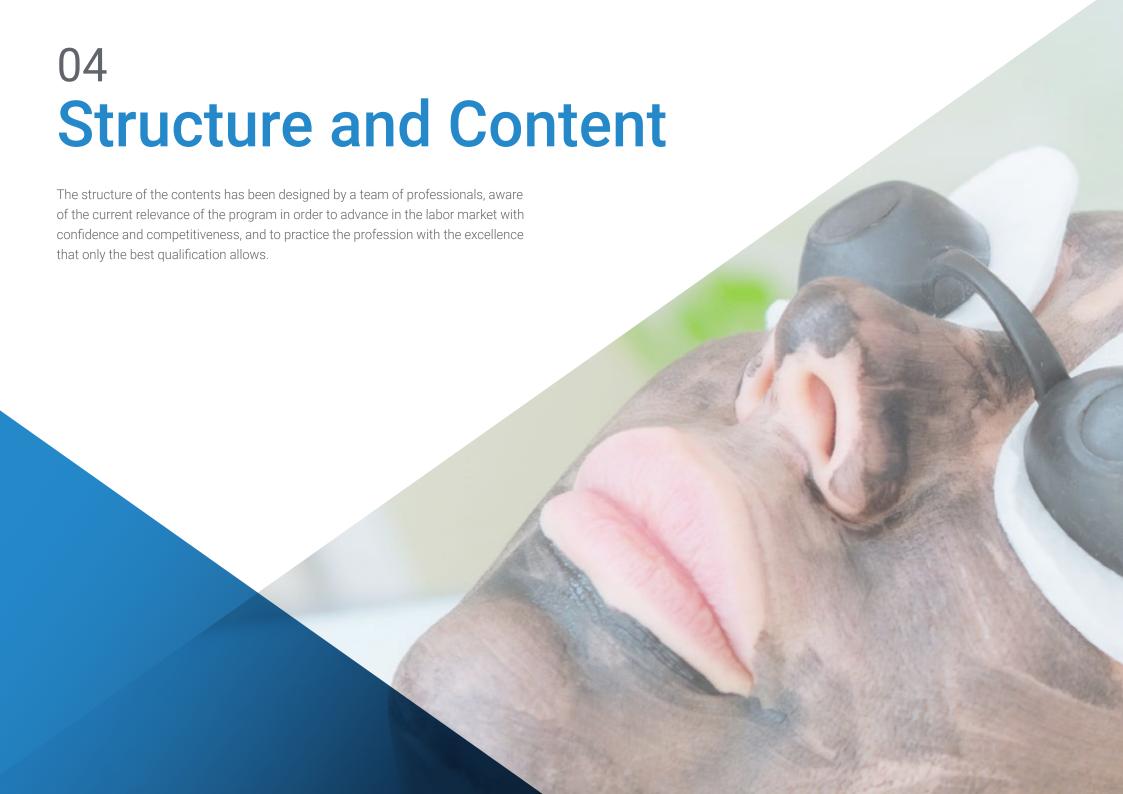
Dr. Ruiz de Almirón, Antonio Clemente

• Dermatologist, University of Granada

Dr. Olivares Rueda, Teresa

• Degree in Medicine and Surgery from the University of Murcia







## tech 20 | Structure and Content

### Module 1. Light Source Treatment of Active Acne

- 1.1. Intense Pulsed Light
- 1.2. Pulsed Dye Laser
- 1.3. Nd Laser: YAG
- 1.4. Erbium Laser
- 1.5. KTP Laser
- 1.6. Infrared Laser
- 1.7. Photodynamic Therapy
  - 1.7.1. Photosensitizers
  - 1.7.2. Light Sources
  - 1.7.3. Protocols
- 1.8. Biophotonic Therapy
  - 1.8.1. Mechanism of Action
  - 1.8.2. Procedure
  - 1.8.3. Treatment Guidelines
- 1.9. LEDs and Acne
- 1.10. New Light Sources













## tech 24 | Methodology

#### 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:

- 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.



### Methodology | 27 tech

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.

## tech 28 | Methodology

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**

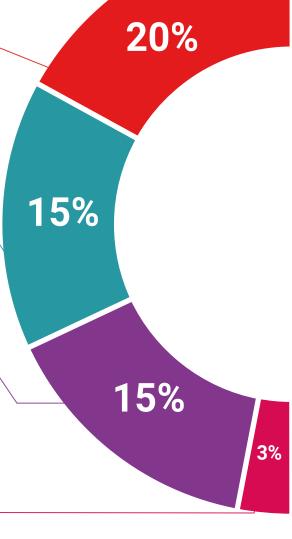
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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

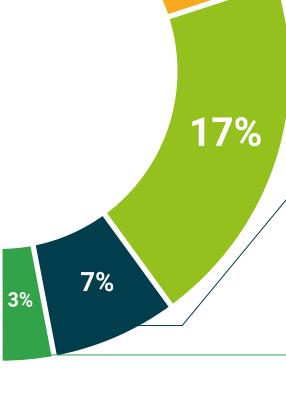
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.









### tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Treatment with Light Sources** 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 Treatment with Light Sources

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Certificate in Treatment with Light Sources

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024





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