

# Postgraduate Certificate

## Biological Basis of Schizophrenia and Other Psychotic Disorders



## Postgraduate Certificate

### Biological Basis of Schizophrenia and Other Psychotic Disorders

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

Website: [www.techtitute.com/us/psychology/postgraduate-certificate/biological-basis-schizophrenia-other-psychotic-disorders](http://www.techtitute.com/us/psychology/postgraduate-certificate/biological-basis-schizophrenia-other-psychotic-disorders)

# Index

01

Introduction

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*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 18*

05

Methodology

---

*p. 22*

06

Certificate

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*p. 30*

# 01

# Introduction

Psychologists and psychiatrists encounter daily difficulties in diagnosing with certainty certain psychotic disorders in their offices due to the scientific obstacles encountered by researchers in charge of studying the neurobiological and genetic bases of mental illnesses. In this 100% online program, the professionals will address in depth the latest advances in the genetic, immunological and neuroendocrinological aspects of psychotic entities. An update of knowledge that will be helped by multimedia content at the forefront of academic teaching and practical simulation cases presented in this program by a specialized teaching team.





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*Update your knowledge on the immunological aspects that influence schizophrenia"*

Mental health professionals will find in this Postgraduate Certificate a broad and renewed knowledge on the Biological Basis of Schizophrenia and other Psychotic Disorders. All of this is provided by a lecturer with extensive experience in the field of psychiatry and academic teaching at the highest level.

During the six weeks of this program, the psychologists will delve into the biological aspects of psychotic disorders, inflammatory changes and their influence on this pathology, risk factors and psychosis in the different stages of a person's life.

With the aim of offering an eminently practical and useful teaching for the day-to-day professional, this program contemplates the approach of recent scientific studies published in international and national journals on schizophrenia and other diseases that affect people's mental health.

An excellent opportunity for the professionals who wish to delve deeper into refractory psychotic disorders and the different methods and drugs used for their treatment. 100% online learning allows students to combine their personal responsibilities with the updating of knowledge, where they only need a device with an Internet connection to access the entire study plan from the first day. In this way, students can download the syllabus to be able to view it at any time, without fixed schedules or attendance by the students.

This **Postgraduate Certificate in Biological Basis of Schizophrenia and Other Psychotic Disorders** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Psychology and Psychotic Disorders
- ♦ 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



*This Postgraduate Certificate will give you a deeper understanding of the latest methods used in the treatment of refractory psychotic disorders"*

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*The case studies provided by the teaching team of this program will allow you to apply the latest techniques and treatments with your patients”*

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

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

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

*Get closer to the latest lines of research on the neuroendocrinological basis of psychotic disorders.*

*Access the most recent developments in neuroimaging in young and adult patients.*



# 02

# Objectives

The syllabus of this university program facilitates the renewal of knowledge for mental health personnel, thanks to the deepening of the latest lines of research in the field of schizophrenia, the biological, genetic and epidemiological factors that influence the appearance of certain diseases at different stages of human development. The Relearning system, based on the reiteration of content, will enable a consolidation of all content, always supported by a specialized teaching team.





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*A 100% online program that will allow you to be aware of the latest treatments used with patients suffering from psychosis"*



## General Objectives

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- ♦ Delve into the current classification of Psychotic Disorders in the different manuals: DSM-5 and ICD-11
- ♦ Consolidate the fundamental clinical aspects of Psychotic Disorders
- ♦ Gain knowledge about the evolution of Psychotic Disorders over time
- ♦ Identify the different types of Psychotic Disorders, their clinical characteristics and diagnosis
- ♦ Delve into the different diagnostic techniques and their new developments in Psychotic Disorders
- ♦ Perform a correct diagnostic approach to Psychotic Disorders
- ♦ Master the different pharmacological and psychotherapeutic approaches to Psychotic Disorders
- ♦ Detail and know the bio-psycho-social influence of Psychotic Disorders in children and adolescent, adult and elderly stages
- ♦ Learn about new approaches to intervention in the rehabilitation of schizophrenia and psychotic disorders
- ♦ Delve into new lines of scientific research in psychotic disorders





## Specific Objectives

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- ♦ Understand the most relevant epidemiological aspects of psychotic disorders
- ♦ Analyze the biological factors that influence psychotic disorders
- ♦ Delve into the most relevant genetic, immunological and inflammatory aspects of from Psychotic Disorders

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*Access without fixed schedules to a syllabus that brings you recent research on etiopathogenesis of psychotic disorders”*

# 03

## Course Management

TECH has a philosophy based on quality education within everyone's reach. To this end, it rigorously selects the teaching team that teaches each of its programs. In this program, the psychologists have a professional with extensive experience in a referral hospital and in the field of psychotic disorders. Likewise, they have a high level of academic knowledge in different teaching institutions. They will bring to this course all their knowledge about the latest advances in psychiatric medicine.





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*A specialized teaching team will bring to this Postgraduate Certificate course their extensive knowledge in the field of medical psychiatry"*

## International Guest Director

Dr. David Kimhy conducts his extensive clinical and academic work at the Icahn School of Medicine at Mount Sinai. Specifically, he directs the Experimental Psychopathology Laboratory and heads the New Interventions in Schizophrenia Program. At the same time, he collaborates with the New York Mental Illness Research, Education and Clinical Center (NY MIRECC).

The research work of this prestigious psychiatrist is characterized by integrating innovative approaches that facilitate the understanding and treatment of psychotic disorders. In this way, his work has focused on addressing the cognitive, affective and behavioral processes that underlie severe mental illness.

He also leads 2 major studies funded by the American Institute of Mental Health. The first is a randomized, multi-site, blinded clinical trial that delves into the efficacy of aerobic exercise in improving neurocognition and daily functioning. In addition, it analyzes the impact of sleep on individual faculties as well. In turn, with these studies, he addresses the role of biomarkers such as BDNF and other neurotrophins in the change of abilities in each individual.

Dr. Kimhy's more than 2 decades of experience have made him a true international authority on cognitive and behavioral interventions aimed at improving the affective and social functioning of patients. To acquire his most advanced skills, this expert has completed postdoctoral stays and fellowships at leading centers such as the Schizophrenia Research Laboratory at Columbia University and the Beck Institute. Moreover, he has published several articles in some of the most important scientific journals. Likewise, his results have been reported by media such as NBC News, Scientific American and New York Magazine.



## Dr. Kimhy, David

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- ♦ Director of the Experimental Psychopathology Laboratory at Icahn School of Medicine at Mount Sinai, NY, USA
- ♦ Director of the New Interventions in Schizophrenia Program at the Icahn School of Medicine at Mount Sinai
- ♦ Investigator of the New York Mental Illness Research, Education and Clinical Center (NY MIRECC)
- ♦ Consultant on NeuroCog Trials
- ♦ Postdoctoral Research Fellow at Columbia University Medical Center
- ♦ Research Fellow at the Beck Institute for Cognitive-Behavioral Therapy
- ♦ Clinical Psychology Fellow in Psychology at Long Island Jewish Medical Center

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

## Management



### Dr. Soto Laguna, Marta

- ♦ Psychiatrist Expert in Anxiety Disorders
- ♦ Psychiatrist at Enova Medical Center
- ♦ Author and co-author of book chapters related to Psychiatry
- ♦ Co-author of articles for scientific journals
- ♦ Speaker at congresses and conferences in her specialty
- ♦ Master's Degree in Legal Psychiatry from the Complutense University of Madrid





# 04

## Structure and Content

The syllabus of this Postgraduate Certificate delves into the key concepts of the biological bases that determine the onset of schizophrenia at different stages of a person's life, as well as different psychotic disorders. An extensive program of 180 hours of teaching load for the psychology professionals to be aware of the latest notes on the role of immunology and the influence of inflammatory factors in these mental illnesses. A comprehensive teaching that allows easy and agile access to it, thanks to the virtual platform where the video summaries of each topic and specialized readings are hosted.





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*A syllabus made up of video summaries and specific readings will provide you with the key knowledge to understand the latest changes in the treatment of psychotic disorders"*

## Module 1. Biological Principles of Schizophrenia and Other Psychotic Disorders

- 1.1. The Neurobiology of Psychosis
  - 1.1.1. The Brain and Psychosis
- 1.2. Genetic Aspects in Psychotic Disorders
- 1.3. Neuroendocrinological Bases in Psychotic Disorders
- 1.4. Role of Immunology in Psychotic Disorders
- 1.5. Influence of Inflammatory Factors in the Psychotic Spectrum
- 1.6. Neurobiological Aspects of Psychosis in the Different Stages of Life
  - 1.6.1. Children and Adolescents
  - 1.6.2. Adult
  - 1.6.3. Elderly
- 1.7. Etiopathogenesis of Psychotic Disorders and its Influence on the Evolution of the Disorder
  - 1.7.1. Risk Factors
  - 1.7.2. Protective Factors
- 1.8. Neuroimaging in Psychosis
- 1.9. Approach to Refractory Psychotic Disorders
- 1.10. Current Positioning of Psychotic Entities in the Biological Plane
  - 1.10.1. Scientific Developments





“ *A program designed to update all your knowledge about psychosis in childhood, adolescence, adulthood and old age*”

# 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

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 the psychologist experiences 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 psychologist'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. Psychologists who follow this method not only master the assimilation of 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 psychologist to better integrate knowledge into clinical practice.
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.

Our 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, which is a real revolution compared to the simple study and analysis of cases.

*The psychologist 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).

This methodology has trained more than 150,000 psychologists with unprecedented success in all clinical specialties. 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 our 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.



#### Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current psychology. 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 Certificate in Biological Basis of Schizophrenia and Other Psychotic Disorders guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Certificate in Biological Basis of Schizophrenia and Other Psychotic Disorders** 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 Biological Basis of Schizophrenia and Other Psychotic Disorders**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**







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