



# Postgraduate Certificate

Nephro-Urological Pathology in the Complex Chronic Patient

» 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/nephro-urological-pathology-complex-chronic-patient

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# tech 06 | Introduction

People suffering from multiple pathologies are exposed to ionic disturbances, i.e. ion imbalances in the body. These electrically charged particles play a key role in many physiological functions such as acid-base regulation. But when these levels become disproportionate, they can lead to serious complications for users. For example, they give rise to new disorders including hyponatremia. In response, it is crucial for healthcare specialists to assess the underlying causes and to design a treatment plan.

In this context, TECH has implemented an advanced program that will focus on the analysis of Sodium, Potassium and Magnesium alternations. Designed by experts in the field, the curriculum includes the interactions between Electrolytes in Complex Chronic Patients. In addition, the syllabus provides a comprehensive discussion of the importance of regular monitoring of blood ion levels to ensure proper management of these conditions. On the other hand, the didactic materials offer multiple strategies for the treatment of pathologies such as Hematurias, Bladder Carcinomas and even delve into the clinical approach to Sexual Dysfunctions. In this way, students will be qualified to apply the best therapeutic options to their patients and carry out measures to prevent possible worsening.

The university program is based on a 100% online methodology, allowing students to complete it comfortably and at their own pace. For the analysis of its contents, they will only required an device with Internet access; the schedules and evaluation chronograms can be planned individually. Along the same lines, the syllabus is based on the innovative Relearning teaching system, which consists of the reiteration of concepts to guarantee effective assimilation.

This Postgraduate Certificate in Nephro-Urological Pathology in the Complex Chronic Patient contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by experts in Complex Chronic Patients
- 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 the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



You will adopt in your daily medical practice the most advanced strategies for dealing with Ionic Disorders through this 180-hour program"



TECH multimedia resources will allow you to consolidate in a more dynamic way skills for interdisciplinary coordination in the treatment of Complex Chronic Patients"

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 education programmed to learn in real situations.

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

Thanks to the Relearning methodology, a pioneer in TECH, you will update your skills with less effort and higher performance, getting more involved in your professional specialization.

Enjoy the most updated academic content in the educational panorama, which you can download or consult online whenever you wish.







# tech 10 | Objectives



### **General Objectives**

- Examine the medical problems common to most chronic and complex patients
- Present complementary therapies to the pharmacological approach
- Delve into the legal basis and bioethical aspects of the care of patients with chronic illnesses
- Provide a rationale for the Comprehensive Geriatric Assessment (CGA) as a set of tools that allow a diagnostic approach to the complex chronic patient
- Analyze the main Geriatric Syndromes and their clinical and social importance
- Assess the incidence and prevalence of nephro-urological diseases in chronic patients
- Analyze gastrointestinal diseases in patients with chronic medical conditions
- Investigate, analyze and propose comprehensive strategies for understanding and improving the management of infectious diseases in patients with complex chronic pathology
- Adequately define endocrinological pathology in chronic and complex patients
- Seek strategies that improve the patient's quality of life, minimizing the limitations imposed by the disease and its treatments
- Develop comprehensive care strategies that respond to patients' needs and improve their quality of life
- Delve into different models of health care for complex chronic patients





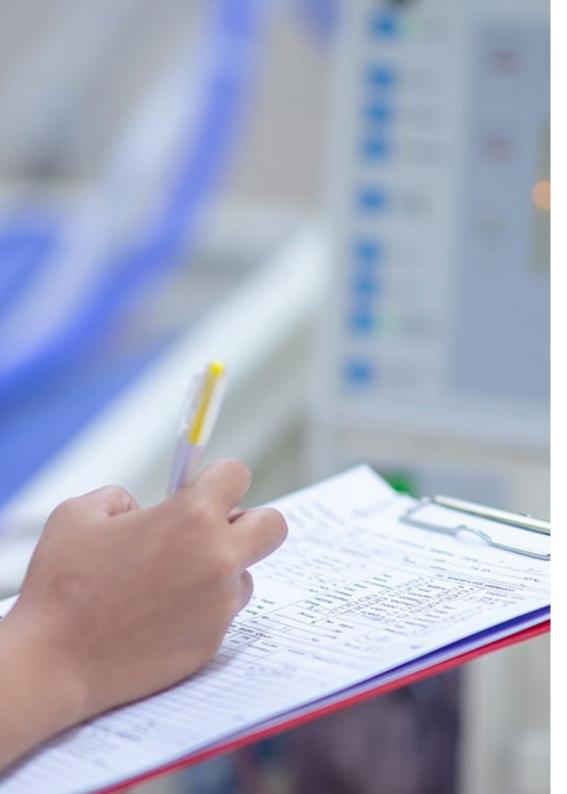


# **Specific Objectives**

- Identify common comorbidities associated with nephro-urologic diseases in chronic patients
- Synthesize findings to provide practical recommendations for health professionals



Boost your professional career thanks to the academic advantages TECH provides through the analysis of case studies based on real patients"





#### **International Guest Director**

Awarded by the American Society of Addiction Medicine for his research in this field, Robert W. Kirchoff is considered a prestigious physician specialized in the approach to Substance Use Disorders. In this sense, he has developed most of his career in health institutions of international reference, such as the Mayo Clinic Hospital in Minnesota or the Saint Joseph Mercy Health System in Michigan.

Among his main achievements, his great contribution to the foundation of the Laboratory of Informatics and Machine Learning stands out. In this way, he has contributed significantly to the improvement of hospital resources through Predictive Analytics. He has also used this technological tool belonging to Artificial Intelligence to identify patients at risk of drug dependence and relapse. As a result, it has enabled numerous users to acquire advanced coping strategies in order to avoid drug use.

It should be noted that he balances this work with his facet as a clinical researcher. In this regard, he has an extensive production on subjects such as the applications of Big Data to the field of medicine, the most innovative pharmacological treatments to combat alcohol addiction, translational informatics applied to individuals with psychological disorders, techniques to prevent drug abuse or cutting-edge methodologies for the treatment of drug addiction.

On the other hand, in his firm commitment to the advancement of medical technology, he regularly participates as a speaker at scientific congresses and symposiums on an international scale. Thanks to this, he has facilitated the health community to have a greater knowledge of drug-assisted therapies for chemical dependency. In turn, he has enabled specialists to acquire the skills to get the most out of Clinical Bioinformatics and to optimize both their diagnostics and disease management considerably.



# Dr. Kirchoff, Robert W.

- President for Research at Mayo Clinic Hospital in Minnesota, United States
- Medical Director at Foundations Detroit
- President of the American Society for Addiction Medicine
- Founder of the Laboratory of Informatics and Machine Learning at Mayo Clinic Hospital
- Attending Physician at Saint Joseph Mercy Health System in Michigan
- Master of Science in Medical Informatics from The Johns Hopkins University School of Medicine
- Bachelor of Arts, Biology and Chemistry from Albion College
- Internal Medicine Resident Physician at Wayne State University School of Medicine
- General Surgery Residency at Mayo Clinic Hospital
- Board Certified by the American Board of Internal Medicine
- Fellow of the American Board of Preventive Medicine



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

### Management



### Dr. Romero Pareja, Rodolfo

- Specialist in Family and Community Medicine
- Medical Director at the Emergency Hospital Nurse Isabel Zendal
- Area Physician, Emergency Department, at the University Hospital of Getafe
- Collaborator of working groups in programs of Medicine; Health Management and Planning for Health Managers; and Emergency and Critical Care
- Doctor of Medicine, University of Oviedo
- Master's Degree in Emergency Medicine from the Complutense La University of Madrid
- Master in Medical Management and Clinical Management by the National School of Health, Instituto Salud Carlos III and Universidad Nacional Educación a Distancia
- Degree in Medicine and Surgery from the Complutense University of Madrid



### Dr. Tejedor López, Luis

- Specialist in Geriatrics
- Specialist Physician in Geriatrics, Emergency Hospital Nurse Isabel Zendal
- Medical Case Manager. HealthMotiv S.I.
- President of the MIR Association Spain
- Master's Degree in Support Treatment and Palliative Care in Oncology Patients, Isabel I University
- MBA in Health Management and Administration from the European School of Health Education
- Medical Specialist in Geriatrics via MIR
- Degree in Medicine from the University of Navarra

# tech 18 | Course Management

### **Professors**

### Dr. Artero Ortiz, Jorge

- Specialist in Geriatrics and Gerontology
- Specialist Physician in Geriatrics, Emergency Hospital Nurse Isabel Zendal
- Medical Specialist in Geriatrics of the Acute Unit, at the Hospital Universitario Guadalajara
- Medical Specialist in Geriatrics of the Acute Unit, at the Hospital General Universitario Gregorio Marañón
- Medical Specialist in Geriatrics of the Geriatric Emergencies Unit, at the Hospital Rey Juan Carlos
- Master's Degree in Palliative Care from the Pontifical University of Salamanca Degree in Medicine from the European University of Madrid
- Member of: Spanish Society of Geriatrics and Gerontology (SEGG), Spanish Society of Geriatric Medicine (SEMEG) and Pain Committee at the Red Cross Central Hospital







Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"





## tech 22 | Structure and Content

### Module 1. Nephro-Urological Pathology in the Complex Chronic Patient

- 1.1. Chronic Kidney Disease (CKD) in Complex Chronic Patients
  - 1.1.1. Diagnosis and Evaluation of Chronic Kidney Disease in Complex Chronic Patients
  - 1.1.2. Treatment and Management of Chronic Kidney Disease in Complex Chronic Patients
  - 1.1.3. Complications of Chronic Kidney Disease in Complex Chronic Patients
  - 1.1.4. Challenges and Strategies in the Management of Chronic Kidney Disease in this Type of Patient
  - 1.1.5. Innovations and Future Directions in Chronic Kidney Disease Research
- 1.2. Ionic Alterations in Complex Chronic Patients
  - 1.2.1. Sodium (Na+), Potassium (K+), Magnesium (Mg2+) Alterations
  - 1.2.2. Electrolyte Interactions in Complex Chronic Patients
  - 1.2.3. Evaluation and Monitoring of Ionic Alterations in Complex Chronic Patients
  - 1.2.4. Treatment and Prevention Strategies
- 1.3. Benign Prostatic Hyperplasia (BPH) in the Complex Chronic Patient
  - 1.3.1. Complications and Comorbidities in the Complex Chronic Patient
  - 1.3.2. Treatment and Management of the Complex Chronic Patient
  - 1.3.3. Innovations and Challenges in the Treatment of BPH
  - 1.3.4. Prevention in the Complex Chronic Patient
- 1.4. Lithiasis in the Complex Chronic Patient
  - 1.4.1. Contributing Factors in Complex Chronic Patients
  - 1.4.2. Complications in Renal Health Impact in Complex Chronic Patients
  - 1.4.3. Treatment and Management of Kidney Lithiasis in Complex Chronic Patients
  - 1.4.4. Innovations and Challenges in the Treatment of Renal Lithiasis
- 1.5. Functional Bladder Disorders in the Complex Chronic Patient
  - 1.5.1. Complications and Comorbidities in Complex Chronic Patient
  - 1.5.2. Treatment and Management of Complex Chronic Patient
  - 1.5.3. Innovations and Challenges in the Treatment
  - 1.5.4. Psychosocial Considerations and Quality of Life
- 1.6. Hematuria in the Complex Chronic Patient
  - 1.6.1. Complications and Comorbidities in the Complex Chronic Patient
  - 1.6.2. Treatment and Management of the Complex Chronic Patient
  - 1.6.3. Innovations and Challenges in the Treatment of Hematuria





## Structure and Content | 23 tech

- 1.7. Vesical Carcinoma in the Complex Chronic Patient
  - 1.7.1. Treatment and Management of the Complex Chronic Patient
  - 1.7.2. Complications and Comorbidities in the Complex Chronic Patient
  - 1.7.3. Prognosis and Survival
  - 1.7.4. Innovations and Challenges in the Treatment of Bladder Cancer
  - 1.7.5. Quality of Life and Psychosocial Support
- 1.8. Renal Carcinoma in the Complex Chronic Patient
  - 1.8.1. Treatment and Management of the Complex Chronic Patient
  - 1.8.2. Complications and Comorbidities in the Complex Chronic Patient
  - 1.8.3. Prognosis and Survival of the Complex Chronic Patient
  - 1.8.4. Innovations and Challenges in the Treatment of Renal Cancer
  - 1.8.5. Quality of Life and Psychosocial Support
- 1.9. Prostatic Carcinoma in the Complex Chronic Patient
  - 1.9.1. Treatment and Management of the Complex Chronic Patient
  - 1.9.2. Complications and Comorbidities in the Complex Chronic Patient
  - 1.9.3. Prognosis and Survival of the Complex Chronic Patient
  - 1.9.4. Innovations and Challenges in the Treatment of of Prostate Cancer
  - 1.9.5. Quality of Life and Psychosocial Support
- 1.10. Impact of Nephro-Urological Diseases on Sexuality in the Complex Chronic Patient
  - 1.10.1. Impact of Nephro-Urological Diseases on Sexuality in Complex Chronic Patient
  - 1.10.2. Specific Sexual Dysfunction
  - 1.10.3. Clinical Approach to Sexual Dysfunctions
  - 1.10.4. Treatments and Management Strategies in Complex Chronic Patients





# tech 26 | 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 | 29 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.

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 34 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Nephro-Urological Pathology in the Complex Chronic Patient** 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.

 $\label{thm:complex} \textbf{Title: Postgraduate Certificate in Nephro-Urological Pathology in the Complex Chronic Patient} \\$ 

Modality: **online** 

Duration: 6 weeks

Accreditation: 6 ECTS



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

# Postgraduate Certificate in Nephro-Urological Pathology in the Complex Chronic Patient

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



<sup>\*</sup>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 Certificate

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