

# Postgraduate Certificate Interstitial Lung Diseases



## Postgraduate Certificate Interstitial Lung Diseases

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

Website: [www.techtitute.com/us/medicine/postgraduate-certificate/interstitial-lung-diseases](http://www.techtitute.com/us/medicine/postgraduate-certificate/interstitial-lung-diseases)

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Certificate

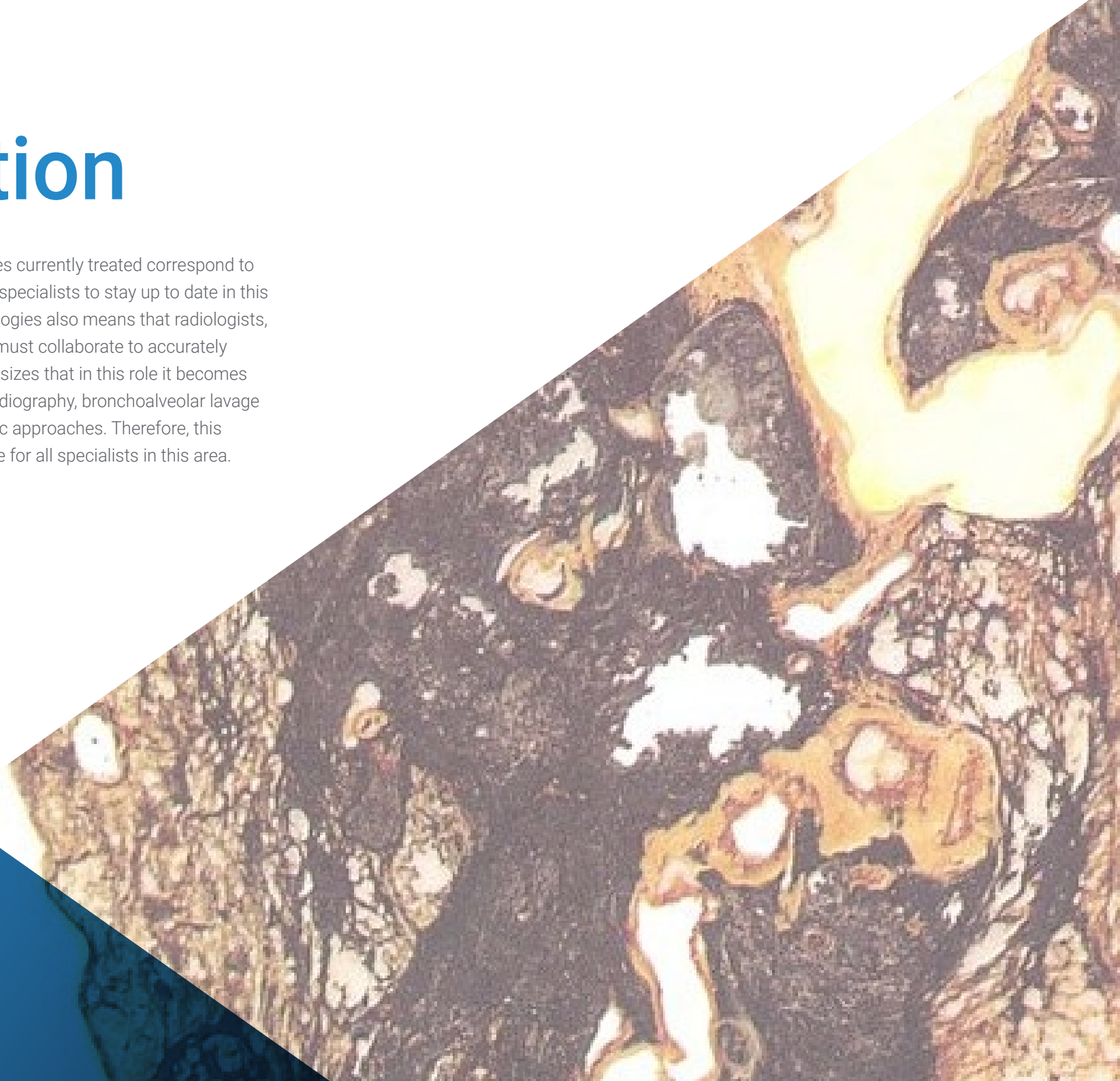
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# 01

# Introduction

Given that 15% of the respiratory pathologies currently treated correspond to Interstitial Lung Diseases, it is essential for specialists to stay up to date in this field. The difficulty in detecting these pathologies also means that radiologists, anatomopathologists and pulmonologists must collaborate to accurately diagnose these cases. The program emphasizes that in this role it becomes vital to have updated knowledge in chest radiography, bronchoalveolar lavage or surgical biopsies, among other diagnostic approaches. Therefore, this course is a complete and exhaustive update for all specialists in this area.





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*Incorporate the latest advances in idiopathic pulmonary fibrosis, sarcoidosis, hypersensitivity pneumonitis and other interstitial lung diseases into your daily practice”*

Currently, more than 150 possible causes have been described for the different Interstitial Lung Diseases (ILD), which makes them very difficult to diagnose. Thanks to recent studies in the field, specialists can better define ILD. It is even advisable, based on the most prestigious international guidelines, to create multidisciplinary teams devoted to this task.

It is important for specialists to have the latest scientific postulates available to them, as idiopathic pulmonary fibrosis is one of the most problematic diseases, with a generally poor prognosis, which, if it becomes severe, will most likely lead to lung transplantation.

Furthermore, this Postgraduate Certificate emphasizes other rare ILDs, such as those associated with drugs, pleuropulmonary fibroelastosis or alveolar microlithiasis. With all this renewed and up-to-date knowledge, specialists will continue to offer the best possible professional practice in the treatment and diagnosis of Interstitial Lung Diseases.

TECH is aware of the difficulties that specialists may have when undertaking a course of these characteristics, so this Postgraduate Certificate has been designed in a completely online format, without classes or fixed schedules. The entire syllabus can be downloaded from any device with an Internet connection, allowing students to freely choose when to take on the course load.

This **Postgraduate Certificate in Interstitial Lung Diseases** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ Practical cases presented by experts in Pulmonology
- ◆ 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
- ◆ Special emphasis is placed on innovative methodologies in the approach to respiratory failure and lung transplantation
- ◆ 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 program is the best academic option you will find to update all your knowledge about Interstitial Lung Diseases at your own pace”*

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*You will have access to the latest research and scientific postulates in the diagnosis of lymphangiomyomatosis, pulmonary Langerhans cell histiocytosis and lymphocytic interstitial pneumonia”*

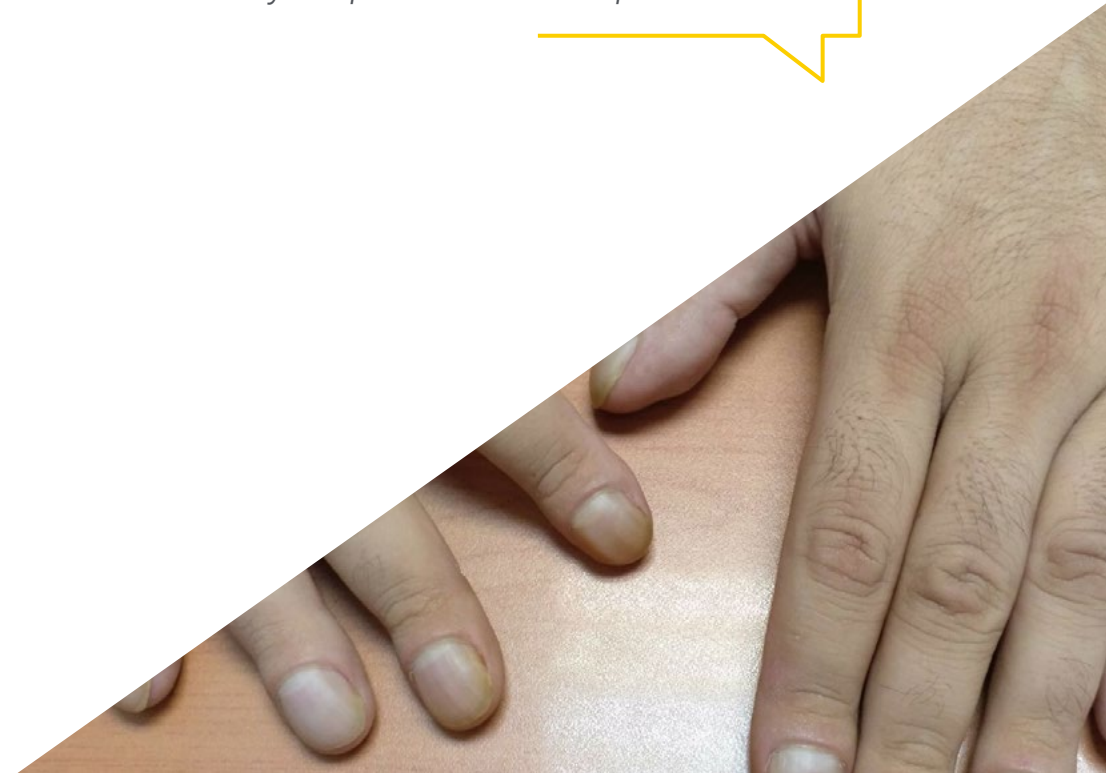
*The best group of medical and academic professionals will be at your disposal to guide and support you throughout the entire learning process.*

*This is the perfect option to follow your continuous updating work without leaving aside your professional responsibilities.*

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 professional with situated and contextual learning, i.e., a simulated environment that will provide an immersion 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.



# 02 Objectives

Since Interstitial Lung Diseases have similar clinical, radiological and functional characteristics, specialists must have the best and most updated diagnostic tools to find the most ideal approach possible. This program provides specialists with that necessary update, as they will have at his disposal precisely ten topics of great depth on all the most relevant types of ILD.







*Review the latest scientific evidence in the field of Pulmonology with leading professionals in the sector”*



## General Objectives

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- ◆ Provide an update on the latest scientific evidence available in published guidelines, scientific articles and systematic reviews
- ◆ Address the fundamental aspects for the care practice of pneumologic pathologies
- ◆ Update knowledge of the most frequent pathologies in Pulmonology





## Specific Objectives

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- ◆ Update the most relevant theoretical medical knowledge on ILD
- ◆ Deepen specific understanding of the scientific and technical aspects related to the most prevalent ILD
- ◆ Actively promote the continued specialization of every professional in order to improve clinical care and practice



*Dive into the most updated epidemiology and pathogenesis of pulmonary eosinophilia, with an adapted and modern treatment*

03

# Course Management

Since the field of Pulmonology and Interstitial Lung Diseases requires highly trained professionals, the professors in charge of this program have extensive experience in the approach and treatment of all kinds of pathologies related to this disease. As a result, specialists are assured to receive a rigorous update, based on the faculty's own experience and research.





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*Delve into the advances in Pneumology with an expert of international prestige and a compendium of excellent masterclasses"*

## International Guest Director

Dr. Franck Rahaghi is one of the most prolific international figures in the field of **Pneumology**. Noted for his leadership in quality and medical care, as well as his commitment to clinical research, he has held several important positions at Cleveland Clinic, Florida. Notable among them are his roles as **Chairman of Quality, Medical Director of the Department of Respiratory Care and Director of the Pulmonary Hypertension Clinic**.

Thanks to his studies and continuous preparation in this discipline, he has made several contributions in the **rehabilitation of patients with various respiratory pathologies**. These contributions and permanent academic improvement have allowed him to assume other responsibilities such as the position of **Head of the Department of Pulmonary Education and Rehabilitation**. In addition, he is a member of the Internal Review Committee, responsible for **supervising the correct execution of research and clinical trials** (Activated Protein C and IFN gamma-1b) inside and outside the aforementioned health institution.

In his solid preparation, he has established care links with centers of excellence such as the **Rockefeller University Hospital in New York**, as well as the Internal Medicine programs at the **University of Illinois at Chicago and the University of Minnesota**. He also studied at the **Department of Interventional Pulmonary Pulmonology and Pulmonary Hypertension at the University of California-San Diego**. He has also participated in important academic projects as an instructor in Genetic Medicine.

Dr. Rahaghi has authored and co-authored numerous articles published in renowned scientific journals in the medical field. Among the most recent and significant studies he has unveiled are his researches on the **impact of COVID-19 on the respiratory health of patients**, specifically on its effects in **controlling Pulmonary Hypertension**.

His other fields of interest include **Scleroderma, Sarcoidosis AATD and ILD/IPF**. He is also a consulting member of MedEdCenter Incorporated, a non-profit corporation dedicated to **providing educational materials focused on pulmonary pathologies**. An initiative from where he is committed to promote the education of patients and physicians through new technologies.



## Dr. Rahaghi, Franck

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- ♦ Medical Director, Department of Respiratory Care, Cleveland Clinic Hospital, Florida, USA
- ♦ Director of the Pulmonary Hypertension Clinic attached to the Cleveland Clinic Hospital, Florida, USA.
- ♦ Bachelor of Science (BS), Bioengineering and Biomedical Engineering from the University of San Diego.
- ♦ Master's Degree in Health Sciences/Administration at UC Berkeley

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

## Management



### Dr. Jara Chinarro, Beatriz

- ♦ Head of the Pneumology Service at University Hospital Puerta de Hierro Majadahonda
- ♦ Responsible for the Basic Sleep Unit at the University Hospital Puerta de Hierro Majadahonda.
- ♦ Specialist in the Pneumology Area at the University Hospital Puerta de Hierro Majadahonda.
- ♦ Clinical Research
- ♦ Author of several scientific publications on Pneumology.



### Dr. Ussetti Gil, Piedad

- ♦ Head of the Pneumology Service at University Hospital Puerta de Hierro Majadahonda
- ♦ Director of the Pneumology Research Group at the Institute of Sanitary Research Puerta de Hierro-Segovia de Arana
- ♦ Associate Professor of Pneumology at the Autonomous University of Madrid.
- ♦ Specialist in Pulmonology
- ♦ Degree in Medicine and Surgery from the Central University of Barcelona.
- ♦ Executive Master's Degree in Healthcare Leadership from ESADE.
- ♦ Pneumologist of the Year Award 2021 by the Madrid Society of Pneumology and Thoracic Surgery (Neumomadrid).
- ♦ Member of the Spanish Society of Pneumology and Thoracic Surgery (SEPAR).



## Professors

### Dr. Churruca Arróspide, María

- ◆ Specialist in Pneumology at the La Princesa University Hospital
- ◆ Graduated in Medicine and Surgery at the Complutense University of Madrid
- ◆ Master's Degree in Advances in Diagnosis and Treatment of Airway Diseases, Catholic University of Murcia
- ◆ Member of CEAS at the La Princesa University Hospital

### Dr. Mariscal Aguilar, Pablo

- ◆ Pneumologist at La Paz University Hospital
- ◆ Researcher Specialized in Respiratory Pathologies
- ◆ Degree in Medicine and Surgery from the University of Granada

### Dr. Sanchez-Azofr, Ana

- ◆ Pneumologist at the La Princesa University Hospital. Madrid
- ◆ Specialist in Pulmonology
- ◆ Author of several scientific publications on Pneumology
- ◆ Doctor of Medicine, University of the Basque Country/Euskal Herriko Unibertsitatea (UPV/EHU)

### Dr. Margallo Iribarnegaray, Juan

- ◆ Specialist in Pneumology at the Marqués de Valdecilla University Hospital. Spain
- ◆ Pneumologist at Quirónsalud University Hospital
- ◆ General Practitioner at Gabinete Médico SL
- ◆ Degree in Medicine from the University of Cantabria

### Dr. Jaureguizar Oriol, Ana

- ◆ Pneumologist at the Hospital Ruber Internacional
- ◆ Specialist in Pneumology
- ◆ Specialist in Pneumology at the La Paz University Hospital
- ◆ Physician of the Pneumology Service at the Ramón and Cajal University Hospital
- ◆ Degree in Medicine from the Complutense University of Madrid

### Dr. Barrios, Alba Esperanza

- ◆ Specialist Associate Physician in Pulmonology, Torrejón University Hospital
- ◆ Degree in Medicine from the University of Alcalá, Spain
- ◆ Specialist Physician in Pulmonology, Puerta De Asturias University Hospital
- ◆ Master in Attention Integral Chronic Obstructive Pulmonary Disease, Complutense University of Madrid
- ◆ Lecturer in the Continuing Medical Education Course on Asthma of the Pneumomadrid Foundation

### Dr. Rigual Bobillo, Juan

- ◆ Specialist in Pneumology at the Ramón and Cajal University Hospital
- ◆ Participant in research projects and clinical trials
- ◆ Author of numerous scientific publications
- ◆ Co-author of book chapters on Pneumology
- ◆ Lecturer in postgraduate studies
- ◆ Member of: European Respiratory Society (ERS), Spanish Society of Pneumology and Thoracic Surgery (SEPAR), Neumomadrid

# 04

## Structure and Content

The structure and content of this program have been designed to facilitate study time for specialists as much as possible. TECH focuses on the highest quality of its contents, so in order to ensure a complete and efficient update, students will gradually and naturally learn the most important terms. Furthermore, the clarity and conciseness displayed by the teaching staff when structuring the topics makes it easier for specialists use them as a reference.





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*You will update all your knowledge of Pulmonary Diseases with a complete syllabus, designed to meet your most demanding professional needs”*

## Module 1. Interstitial Lung Diseases

- 1.1. ILD's
  - 1.1.1. Classification and Epidemiology of ILD's
  - 1.1.2. Diagnostic Approximation
    - 1.1.2.1. Medical History. Physical Examination
    - 1.1.2.2. Clinical Laboratory and Pulmonary Function Laboratory
    - 1.1.2.3. Radiodiagnosis: Chest Radiography HRCT. Radiological Patterns
    - 1.1.2.4. Invasive Techniques: Bronchoalveolar Lavage (BAL), Transbronchial Biopsy (TBB) and Cryobiopsy. Surgical Biopsy. Indications and Pathologic Patterns
    - 1.1.2.5. Multidisciplinary Diagnosis
  - 1.1.3. Cellular Aging, Genetics and Biomarkers in ILD
    - 1.1.3.1. Pathogenesis of Cellular Aging
    - 1.1.3.2. Characteristics, Value, Prognosis and Treatment of Telomeric Disorders
    - 1.1.3.3. Familial Pulmonary Fibrosis. Biomarkers Diagnostic, Prognostic and Therapeutic Use
- 1.2. Idiopathic Pulmonary Fibrosis
  - 1.2.1. Epidemiology
  - 1.2.2. Risk Factors
  - 1.2.3. Natural History and Prognosis
  - 1.2.4. Diagnostic Approximation
    - 1.2.4.1. Clinical Manifestations Physical Examination
    - 1.2.4.2. Radiological Criteria
    - 1.2.4.3. Histopathological Criteria
    - 1.2.4.4. Useful Biomarkers in IPF
  - 1.2.5. Treatment
  - 1.2.6. Exacerbation of IPF
- 1.3. Idiopathic Non-specific Interstitial Pneumonia (NSIP) ILD Associated With Systemic Autoimmune Diseases (I): ILD Associated with Rheumatoid Arthritis (ILD- RA) and ILD Associated with Systemic Sclerosis (ILD-SS)
  - 1.3.1. Idiopathic NSIP
    - 1.3.1.1. Histopathological Forms
    - 1.3.1.2. Diagnostic Tests
    - 1.3.1.3. Treatment
    - 1.3.1.4. Prognosis
  - 1.3.2. ILD Associated With Systemic Autoimmune Diseases
    - 1.3.2.1. RA-ILD
    - 1.3.2.2. SSc-ILD
- 1.4. ILD Associated With Systemic Autoimmune Diseases (II)
  - 1.4.1. Dermatitis/Polymyositis
  - 1.4.2. Sjögren's Syndrome
  - 1.4.3. Mixed Connective Tissue Disease. "Overlap" Syndrome
  - 1.4.4. Interstitial Pneumonia with Autoimmune Features (IPAF)
- 1.5. Sarcoidosis
  - 1.5.1. Pathophysiology
  - 1.5.2. Histology
  - 1.5.3. Diagnostic Approximation
  - 1.5.4. Evolution and Prognosis
  - 1.5.5. Treatment
- 1.6. Hypersensitivity Pneumonitis
  - 1.6.1. Etiology
  - 1.6.2. Pathophysiology
  - 1.6.3. Classification. Clinical Forms
  - 1.6.4. Diagnostic Criteria. Differential Diagnosis
  - 1.6.5. Natural History and Prognosis
  - 1.6.6. Treatment

- 1.7. Cystic Pulmonary Diseases
  - 1.7.1. Lymphangioleiomyomatosis (LAM)
    - 1.7.1.1. Clinical Manifestations
    - 1.7.1.2. Diagnostic Approximation
    - 1.7.1.3. Treatment
  - 1.7.2. Langerhans Cell Histiocytosis(HPCL)
    - 1.7.2.1. Clinical Manifestations
    - 1.7.2.2. Diagnostic Approximation
    - 1.7.2.3. Treatment
  - 1.7.3. Lymphocytic Interstitial Pneumonia (LIP)
    - 1.7.3.1. Clinical Manifestations
    - 1.7.3.2. Diagnostic Approximation
    - 1.7.3.3. Treatment
- 1.8. Cryptogenic Organizing Pneumonia (COP)
  - 1.8.1. Pathogenesis.
  - 1.8.2. Clinical Manifestations
  - 1.8.3. Radiological Patterns
  - 1.8.4. Diagnostic Approximation
  - 1.8.5. Natural History
  - 1.8.6. Treatment
- 1.9. Work and Occupational Diseases
  - 1.9.1. Diseases Related to Asbestos
    - 1.9.1.1. Varieties of Asbestos. Sources of Exposure
    - 1.9.1.2. Pleural Fibrosis. Clinical Forms and Radiological Diagnosis
    - 1.9.1.3. Asbestosis. Clinical and Radiological Findings, Diagnostic Criteria and Treatment
  - 1.9.2. Silicosis
  - 1.9.3. Coal Pneumoconiosis
- 1.10. Pulmonary Eosinophilias. ILD Associated With Drugs. Other Rare ILDs: Pleuropulmonary Fibroelastosis. Alveolar Microlithiasis. Alveolar Proteinosis
  - 1.10.1. Acute Eosinophilic Pneumonia
    - 1.10.1.1. Epidemiology and Risk Factors
    - 1.10.1.2. Pathogenesis.
    - 1.10.1.3. Clinical, Radiological, Functional and Anatomopathological Diagnosis
    - 1.10.1.4. Treatment
  - 1.10.2. ILD Associated With Drugs
    - 1.10.2.1. Epidemiology
    - 1.10.2.2. Pathogenesis and Risk Factors
    - 1.10.2.3. Diagnostic Approximation
    - 1.10.2.4. Main Causative Agents
  - 1.10.3. Differential Diagnosis of Pulmonary Eosinophilia
  - 1.10.4. Other Rare ILDs: Pleuropulmonary Fibroelastosis, Alveolar Microlithiasis and Alveolar Proteinosis: Diagnostic Approximation, Evolution and Treatment



*Study all the contents at your own pace, as the entire syllabus is available from the beginning of the program”*

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 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.



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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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

*Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



#### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### Surgical Techniques and Procedures on Video

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



#### Interactive Summaries

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

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06

# Certificate

The Postgraduate Certificate in Interstitial Lung Diseases guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Interstitial Lung Diseases** contains the most complete and up-to-date program on the market.

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

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

Title: **Postgraduate Certificate in Interstitial Lung Diseases**

Official N° of Hours: **150 h.**



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



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development languages  
virtual classroom



## Postgraduate Certificate Interstitial Lung Diseases

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

# Postgraduate Certificate Interstitial Lung Diseases

Alveolo