Hybrid Professional Master's Degree

Precision Pulmonology
Genomics and Big Data

tech global university

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Hybrid Professional Master's Degree

Precision Pulmonology
Genomics and Big Data

Modality: **Hybrid (Online + Clinical Internship)**
Duration: **12 months.**
Certificate: **TECH Global University**
Credits: **60 + 4 ECTS**
Website: **www.techtitute.com/us/medicina/master-semipresencial/master-semipresencial-neumologia-precision-genomica-big-data**

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01

Introduction

The human genome has led to the development of more in-depth methods for the diagnosis and treatment of diseases. In the case of respiratory diseases, the latest developments have had positive results, achieving greater prevention of lung cancer and other diseases. The numerous advantages of Precision Pulmonology have generated, in turn, a greater demand for specialists, requiring them to be prepared for all these applications. Therefore, this degree combines, like no other, the theoretical and practical learning of this medical branch. Consisting of a period of online teaching and an on-site and intensive internship in a first level hospital center, the program will update the doctor in the fastest, most flexible and holistic way.

You will acquire, thanks to TECH, a holistic mastery of the latest tools of Genomic Medicine that provide great results for the prevention of various genetic respiratory diseases"

Since the beginning of the 21st century, Precision Medicine has become the paradigm to be achieved in the healthcare field. Based on this need, research in this branch of science has followed one after the other at a dizzying pace, leading to the emergence of diagnostic tools and the development of much more in-depth clinical prevention strategies. Pulmonology has also benefited from this transformation process and, at present, different biomarkers have been discovered that are useful to face hereditary diseases such as Asthma, Cystic Fibrosis or to fight the onset of Lung Cancer.

Based on these needs, TECH has created a first class educational program. In this way, the Hybrid Professional Master's Degree in Precision Pulmonology Genomics and Big Data is made up of two educational moments that will contribute different elements to the training of professionals. First, there is a period of theoretical learning through a platform with multiple interactive resources and multimedia products that will reinforce knowledge and update the specialist on the genetic criteria in relation to the treatment of COPD or lung tumors.

Afterwards, the physician will face a 3-week professional internship in a prestigious health center. During this process, they will have the opportunity to apply all their new skills on real patients and under the careful guidance of the most qualified experts. You will also have an attending tutor who will be in charge of setting tasks to broaden your skills.

The syllabus includes the participation of a prestigious International Guest Director. This specialist, with an outstanding and extensive trajectory in research, will accompany students in the discovery of the most recent innovations in Precision Pulmonology Genomics and Big Data, through 10 exclusive and detailed Masterclasses.

This **Hybrid Professional Master's Degree in Precision Pumonology Genomics and Big Data** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- Development of more than 100 clinical cases presented by experts in Pulmonology, with training in Precision Medicine
- 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.
- Comprehensive plans of systematized action for the main respiratory diseases
- Presentation of practical workshops on procedures diagnosis, and treatment techniques.
- An algorithm-based interactive learning system for decision making in the clinical situations presented
- Practical clinical guides on approaching different disorders
- All this will be complemented by 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.
- Furthermore, you will be able to carry out a clinical internship in one of the best hospital centers

Complement your studies with TECH and enjoy 10 exclusive Masterclasses, led by an internationally renowned expert in the field of Pulmonology"

During the practical phase of this degree, you will learn how to develop advanced immunotherapies for the benefit of patients with lung cancer whose applications are based on in-depth genomic studies"

In this Hybrid Professional Master's Degree, of a professionalizing nature and blended learning modality, the program is aimed at updating professionals in Precision Pulmonology Genomics who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge into Doctor practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision making in patient management.

Thanks to the multimedia content, developed with the latest educational technology, Medicine professionals will benefit from contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Cystic Fibrosis and Asthma are some of the diseases on which you will have an impact, with innovative methods of genetic diagnosis, by completing this excellent Hybrid Professional Master's Degree.

Do not hesitate any longer and enroll in this program that provides you with 1,920 hours of the best theoretical and practical learning in relation to Precision Pulmonology Genomics.

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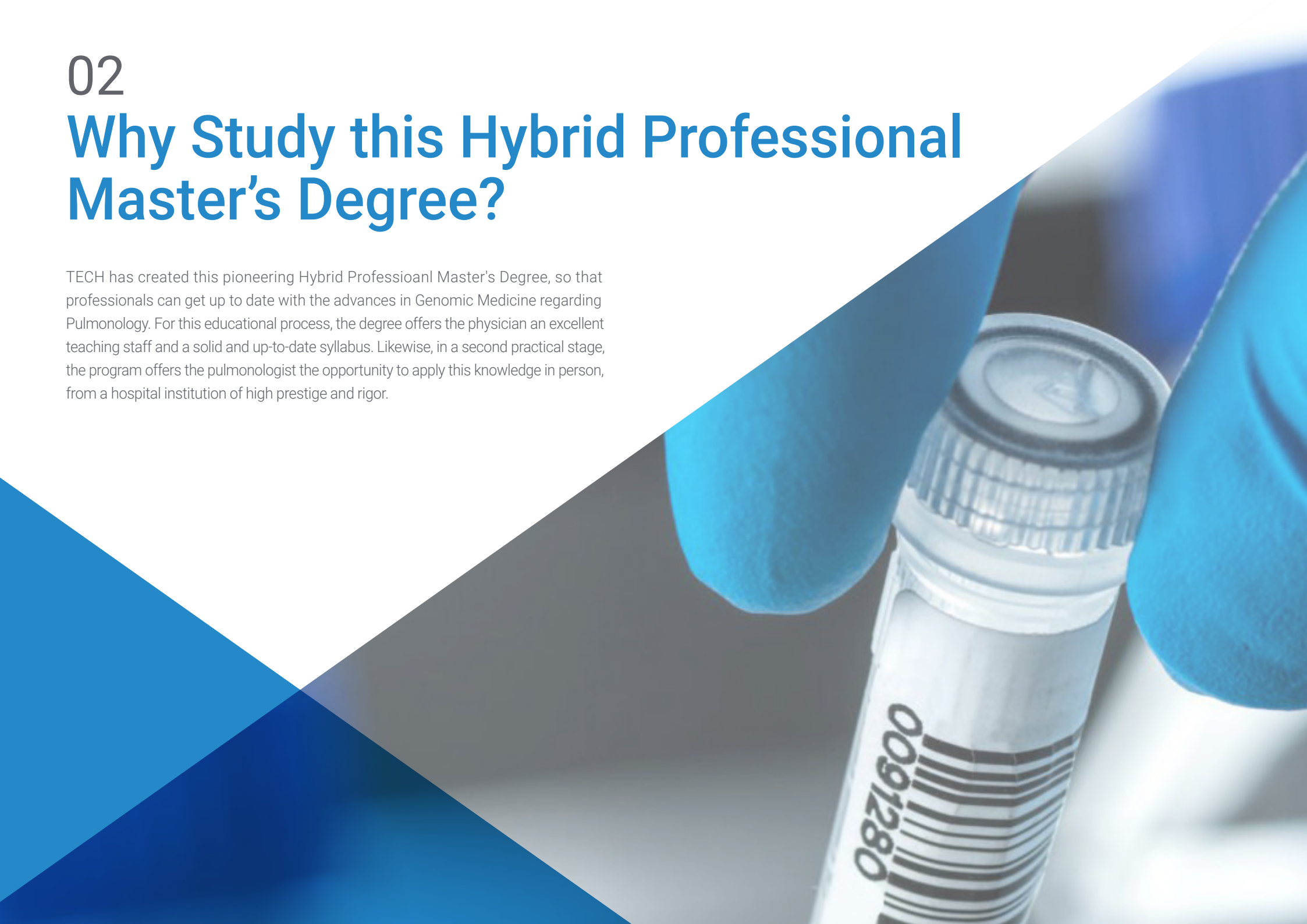
Why Study this Hybrid Professional Master's Degree?

TECH has created this pioneering Hybrid Professioanl Master's Degree, so that professionals can get up to date with the advances in Genomic Medicine regarding Pulmonology. For this educational process, the degree offers the physician an excellent teaching staff and a solid and up-to-date syllabus. Likewise, in a second practical stage, the program offers the pulmonologist the opportunity to apply this knowledge in person, from a hospital institution of high prestige and rigor.



TECH gives you the opportunity to study with prestigious international experts, gaining access to renowned healthcare centers located in distant parts of the world"

1. Updating from the latest technology available

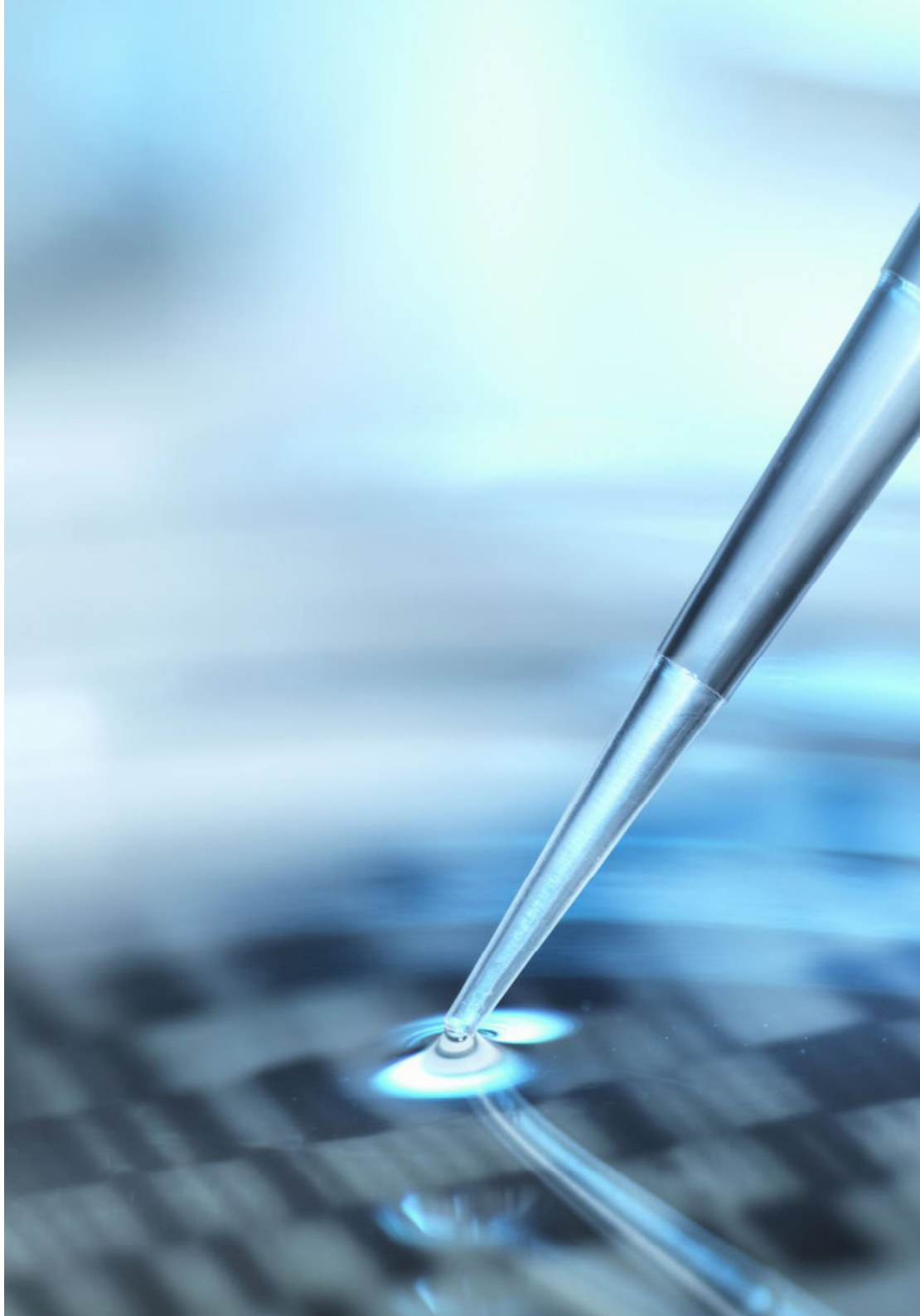
Through this degree, the physician will update their skills regarding the management of the most modern technological tools and protocols of Genomic Medicine applied to Pulmonology. From this intensive study process, they will achieve greater specialization and provide first level care to all their patients.

2. Gaining in-depth knowledge from the experience of top specialists

Through this Hybrid Professional Master's Degree, the physician will have access to a teaching staff of excellence. Through them, they will update on the latest trends in Precision Pulmonology Genomics and the use of Big Data. At the same time, during the internship that comprises the second part of this learning model, they will deploy their new knowledge under the careful guidance of the best health experts.

3. Entering first-class clinical environments

After a thorough review of Precision Pulmonology centers, TECH has chosen those institutions where medical technologies and healthcare personnel come together in an exceptional way. In this way, specialists will have at their disposal the best tools and practical advisors to acquire a more exhaustive and rigorous update on the most innovative postulates and elements of this health area.



4. Combining the best theory with state-of-the-art practice

This two-part academic program stands out for its ability to integrate theoretical knowledge with Internship Program. This is made possible by the fact that, in its second stage, the program includes an on-site internship fully supervised by a renowned tutor, who will assign specific tasks and support the updating of the graduate's skills.

5. Expanding the boundaries of knowledge

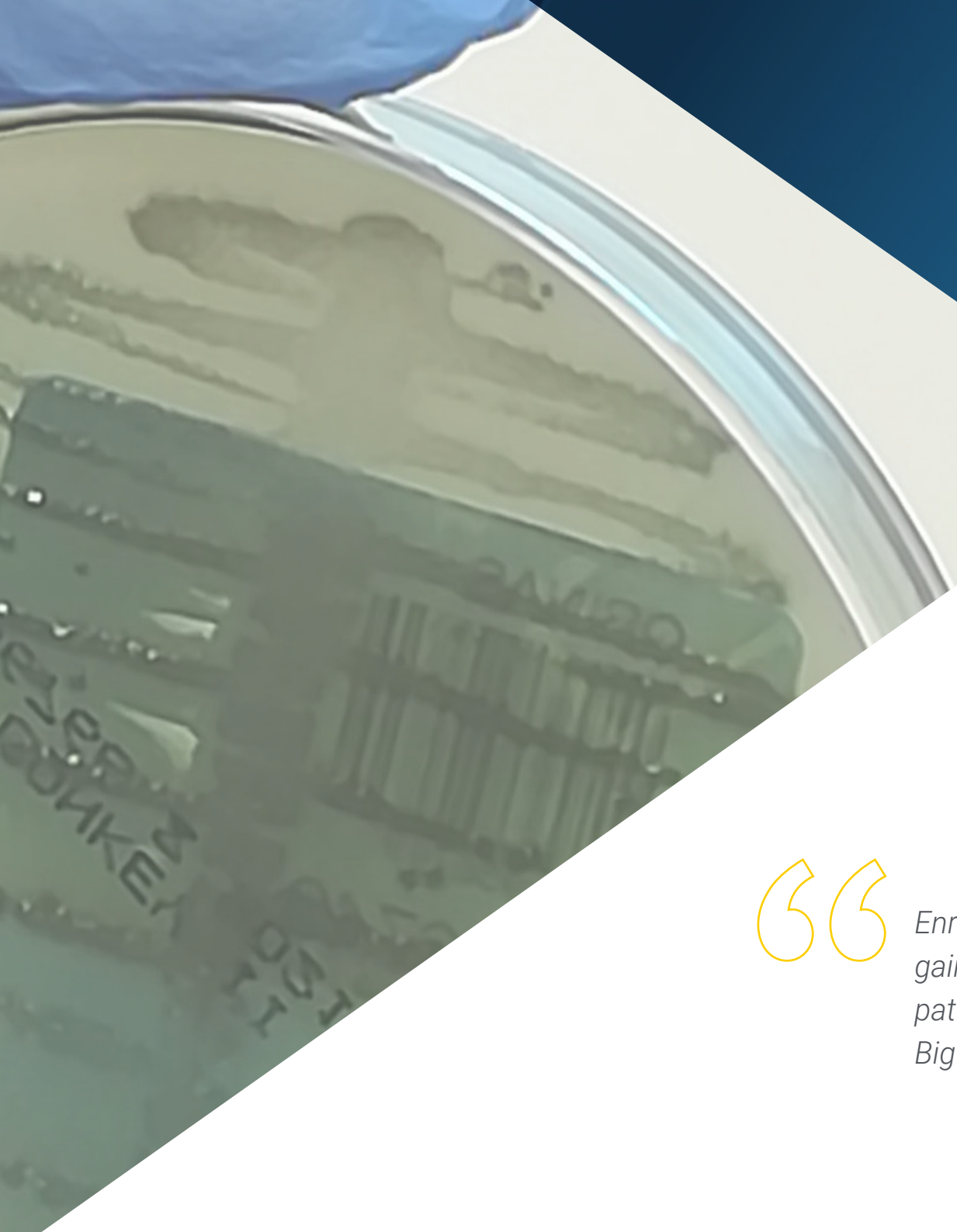
TECH, as an educational institution of international scope, has access to specialized centers located in different parts of the world. Therefore, the physicians who opt for this program to get up to date, will be able to expand their skills from different frontiers and exercise their knowledge alongside the most recognized experts in the global health scenario.

You will have full practical immersion at the center of your choice"

03

Objectives

This Hybrid Professional Master's Degree in Precision Pulmonology Genomics and Big Data is a reference in the educational field due to its up-to-date theoretical and practical contents. Its very complete syllabus will drive the physician towards a more versatile training and adjusted to the use of modern technologies from the genetic and clinical points of view. Likewise, each of the general and specific objectives of this degree will be supervised by professionals with extensive therapeutic and teaching experience who will ensure the specialist a comprehensive mastery of the latest trends in this area of health.



Enroll in this educational program and you will gain rigorous skills to describe different COPD patient trajectories through data collected with Big Data"

General Objective

- The general objective of the Hybrid Professional Master's Degree in Precision Pulmonology Genomics and Big Data is to provide the physician with a deep knowledge of the generic linkage of respiratory diseases. At the same time, it will provide them with the keys to interpret and generate clinical actions from the information provided by Big Data sources. In this way, they will improve their capacity for assessment, prognosis and prevention of pulmonological diseases, developing a professional practice in line with the latest criteria and standards of care in this branch of health.

Specific Objectives

Module 1. Personalized Precision Medicine and Big Data in Pulmonology Prelude

- Delve into the health care and ethical implications of Precision Medicine.
- Study in depth the sources of information on Precision Medicine.
- Master the omic biomarkers of interest in pneumology.
- Determine the contribution of specific care in personalized care.

Module 2. Interventional Pulmonology and Precision Medicine

- Study in depth the minimally invasive bronchological techniques that allow genetic and precision diagnosis
- Learn more about minimally invasive pleural techniques that allow genetic and precision diagnosis
- Master endoscopic invasive treatments for specific pneumologic patients.

Module 3. Precision Medicine, Imaging Techniques and Pulmonary Function

- In-depth knowledge of invasive techniques that increase bronchological diagnostic accuracy
- Master invasive techniques that increase pleural diagnostic accuracy
- Gain an in-depth understanding of precision endobronchial treatments

Module 4. Genetics, Precision Medicine and Pediatric Diseases

- Gain an in-depth understanding of genetic links to disease in the pediatric population
- Delve into the implications of childhood congenital diseases on respiratory health during a person's lifetime
- Master the management of frequent genetic respiratory diseases
- Precision medicine in childhood asthma Use of Biologicals

Module 5. Genetics, Precision Medicine And Asthma

- Gain a deep understanding of the epidemiological associations of asthma that suggest a genetic basis of the disease
- Explore the genetic complexity of asthma in the light of the most current knowledge
- Master the biology, therapeutic targets and clinical use of precision treatments in asthma

Module 6. Genetics, Precision Medicine and Lung Cancer

- Gain deeper insight into the genetic susceptibility of lung cancer.
- Gain an in-depth knowledge into driver gene mutations with approved lung cancer treatments
- Know future treatments against therapeutic targets.
- Master the state of the art of lung cancer treatment with respect to the contribution of treatments based on genetic therapeutic targets.

Module 7. Genetics, Precision Medicine and COPD

- Gain an in-depth understanding of the genetic and perinatal links of COPD.
- Deepen knowledge in genetic links and smoking.
- Delve into hereditary COPD due to alpha-1 antitrypsin deficiency.
- Know the state of the art of COPD management oriented to treatable features.
- Exploring genetic linkage to physical training outcomes in COPD

Module 8. Genetics, Precision Medicine and Other Respiratory Diseases

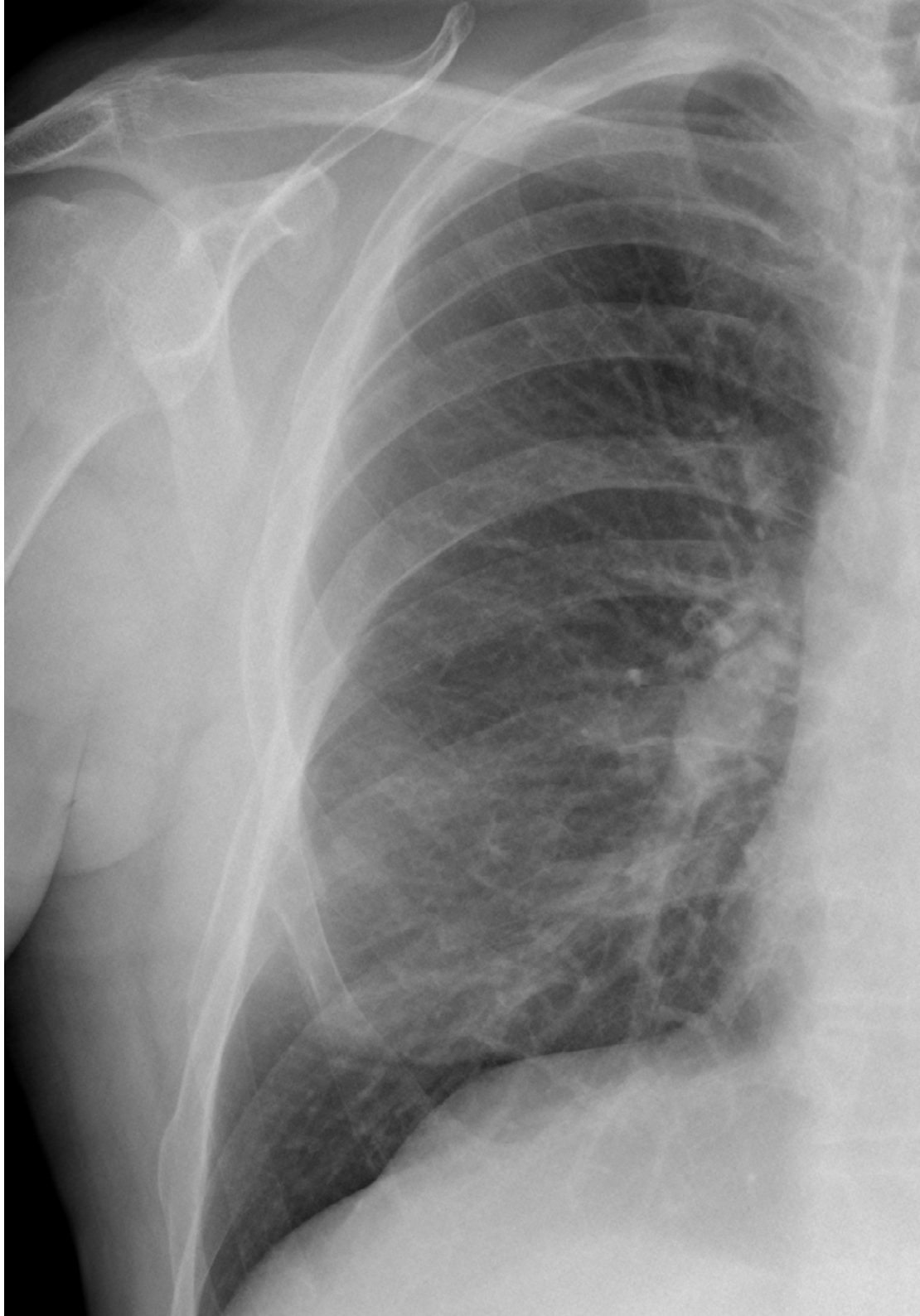
- Delve into genetic links to pulmonary vascular diseases and interstitial diseases.
- Gain an in-depth understanding of genetic links and susceptibility to infection.
- Gain in-depth knowledge about telomeres as prognostic markers in respiratory diseases.
- Master the mechanisms and results of new mRNA-based vaccines.

Module 9. Big Data and Respiratory Diseases I

- Get to know the applications of Big Data in the study of the epidemiology of Respiratory Diseases.
- Discuss the usefulness of Big Data in the evaluation of procedures used in respiratory diseases.
- Explain how Big Data can help in the study of risk factors for Respiratory Diseases.
- Describe the utility of Big Data in the management of obstructive diseases and sleep ventilation disorders.

Module 10. Big Data and Respiratory Diseases II

- Get to know the usefulness of Big Data in the study of Respiratory Diseases of infectious origin.
- Discuss the use of Big Data to assess the impact of environmental pollution on respiratory infections.
- Study in depth the importance of Big Data in the evaluation of other Respiratory Diseases such as pleural pathology, lung cancer, interstitial diseases, pulmonary thromboembolism and pulmonary hypertension.
- Describe the applications of Big Data in the field of Neonatal Onset Respiratory Diseases.



Through this Hybrid Professional Master's Degree, you will update your knowledge about interventional pulmonology to obtain accurate data on the genetics of patients"

04

Skills

After passing the two stages integrated in this study program, the medical professional will master the most modern and demanded care skills in the field of Precision Pulmonology Genomics. In this way, they will be able to efficiently apply their new knowledge and obtain excellent results in the care of patients with respiratory diseases.

Incorporate into your medical practice the latest techniques to assess respiratory function from statistical data collected from Big Data sources"

General Skills

- Apply epidemiological and clinical methods in collective or individual care to solve the main health problems related to respiratory diseases.
- Collect, process and analyze in very diverse clinical and epidemiological contexts any scientific information for diagnostic and therapeutic decision making in the field of Precision Pulmonology in a specific way and health in a general way
- Develop continuing professional development and education due to the vertiginous and accelerated process of scientific knowledge production.

With TECH you will develop rigorous and up-to-date skills, based on the genetic information of your patients, which will help you to prevent diseases such as Lung Cancer"

Specific Skills

- Identify the healthcare and ethical implications of Precision Medicine, understanding the sources of information in this area and mastering the biomarkers that are of interest in pulmonology
- Master endoscopic techniques that are less invasive for patients, improving their ability to perform pulmonary diagnostics
- Personalize the treatment or prognosis of patients with pulmonary diseases
- Gain extensive understanding of childhood diseases associated with specific genetic alterations and their possible implications for future respiratory health
- Review the genetic aspects of asthma, as well as biologic treatments directed at specific targets
- Manage current and future biomarkers and their relationship with the different phenotypes of asthma
- Understand the genetic basis of lung cancer, as well as the most relevant driver mutations for their therapeutic implications
- Apply current strategies for the management of lung cancer at the center of genetic therapeutic targets
- Recognize the genetic links in COPD, as well as the relationship between smoking and genes
- Identify the role of telomeres in lung aging and the mechanism of functioning of mRNA-based vaccines
- Use Big Data in the study of respiratory diseases of infectious origin

05

Course Management

The teachers of this Hybrid Professional Master's Degree have been chosen by TECH with the utmost care. Among the criteria taken into account for their selection is their quality of care and research. The latter is evidenced by the high participation of these experts in academic articles and scientific congresses, as well as their collaboration with academic societies. Based on their excellent backgrounds, the faculty has developed a comprehensive and up-to-date syllabus with the main innovations in Pulmonology. Thanks to their personalized guidance, the student will be able to catch up and master all these new aspects with greater promptness and flexibility.

The teaching staff chosen by TECH for this degree has extensive experience in the use of Big Data to predict the evolution of patients with infectious respiratory diseases"

International Guest Director

Dr. George Chaux is a **medical** professional with a strong background in **Interventional Pulmonology**, **Lung Transplantation** and **Critical Care**. With many years of experience in the **healthcare** industry, he has worked tirelessly to improve the quality of life of his patients through a multidisciplinary and specialized approach. In addition, his deep knowledge in the field of **healthcare management** and **medical care** has positioned him as a reference in his area, always at the forefront of the latest innovations in **Pulmonary Medicine**.

Throughout his career, he has worked in prestigious institutions, such as **Cedars-Sinai Medical Center**, where he has accumulated vast experience in the management of critical and complex cases. He has also been **Medical Director** at **Providence St. John's Health Center**, where he has led the development of **Interventional Pulmonology** and **General Pulmonary Consulting** services, applying advanced techniques that have made a significant difference in the care of his patients. In fact, his focus on excellence and innovation has allowed him to implement procedures that have optimized **clinical outcomes** in every intervention.

Internationally, Dr. George Chaux has been widely recognized for his contributions to **Pulmonary Medicine**. In this regard, he has been invited as a speaker at several global **conferences** on **Lung Transplantation** and **Respiratory Diseases**, having received numerous **awards** for his work in **medical research** and **clinical practice**.

Likewise, he has led **research** in the field of **Genomic Precision Pulmonology** and ***Big Data***, exploring how these **emerging technologies** can revolutionize the diagnosis and treatment of **Lung Diseases**. Likewise, it is worth mentioning that he has published several articles in **specialized journals**, consolidating his position as a reference in the application of **cutting-edge technologies** in **Respiratory Medicine**.

Dr. Chaux, George

- Medical Director at Providence St. John's Health Center, California, United States
- Medical Director of the Interventional Pulmonology Program at Cedars-Sinai Medical Center
- Medical Director of the Lung Transplant Program at Cedars-Sinai Medical Center
- Medical Director of the Lung Transplantation Program at UC San Diego Health Medical Center
- Doctor of Medicine from Boston University
- B.S. in Biochemistry from Bowdoin University

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

Management

Dr. Puente Maestú, Luis

- Chief of the Pulmonology Department at the Gregorio Marañón University General Hospital, Madrid
- Doctor of the Pulmonology Service at the Virgen del Rocío University Hospital, Seville.
- Pneumologist at the University Hospital Vall d'Hebron, Barcelona
- Specialist Physician at the Hospital Marseillaise de St. Marguerite, France
- Specialist Physician at the Gregorio Marañón University General Hospital, Madrid
- Research stay at the Harbor-UCLA Medical Center of the University of California United States
- Doctor of Medicine and Surgery from the Complutense University of Madrid.
- Master's Degree in Design and Statistics in Health Sciences from the Autonomous University of Barcelona.
- Master's Degree in Health Services Management from the Laín Entralgo Agency.
- Professional Master's Degree in Senior Management of Health Services and Business Management by the University of Alcalá
- Member of: European Society of Pulmonology and Thoracic Surgery

Dr. De Miguel Díez, Javier

- Head of Department and Tutor of Residents in the Pulmonology Department at the Gregorio Marañón General University Hospital
- Doctor of Medicine and Surgery from the Autonomous University of Madrid
- Master's Degree in Healthcare Management and Administration
- Master's Degree in Smoking
- Master's Degree in Advances in the Diagnosis and Treatment of Diseases of the Airways
- Postgraduate Master's Degree on Advances in the Diagnosis and Treatment of Sleep Disorders
- Master's Degree in Advances in Diagnosis and Treatment of Diffuse Interstitial Lung Disease
- Master's Degree in Pulmonary Hypertension and Master's Degree in Thrombotic Disease Society of Cardiology

Professors

Dr. De Castro Martínez, Francisco Javier

- Head of the Difficult-to-Control Asthma Consultation of the Allergology Service at the Gregorio Marañón General University Hospital, Madrid.
- Physician in charge in collaboration with the Pulmonology Department of the monographic consultation of Asthma at the Gregorio Marañón General University Hospital, Madrid
- Attending Physician at the Gregorio Marañón University General Hospital, Madrid
- Attending Physician, Emergency Department, Hospital Gregorio Marañón, Madrid
- Degree in Medicine and Surgery from the University of Granada

Dr. Benedetti, Paola Antonella

- Attending Physician, Pulmonology Department, Gregorio Marañón Hospital, Madrid.
- Pulmonologist at Orion Medical Center, Barcelona.
- Clinical Researcher of the Pulmonology Service at the Gregorio Marañón University Hospital
- PhD in Medical and Surgical Sciences, Complutense University of Madrid.

Dr. Zambrano Ibarra, Gabriela

- Allergology Physician at the Gregorio Marañón University General Hospital, Madrid
- Allergology Physician at the University Hospital del Tajo, Madrid
- Allergology Physician at the University Hospital of Fuenlabrada

Dr. Calderón Alcalá, Mariara Antonieta

- Specialist in Pulmonology at the Infanta Leonor University Hospital
- Medical Specialist in Pulmonology at the Gómez Ulla Defense Central Hospital
- Medical Specialist in Pulmonology at the Getafe University Hospital
- Medical Specialist in Pulmonology at the Carpetana Medical Center
- Medical Specialist in Pulmonology at the Móstoles University Hospital
- Specialization in Pulmonology at the San Carlos Clinical Hospital
- University Expert in Interstitial Pulmonary Disease in the Systemic Autoimmune Diseases from the Complutense University of Madrid

Dr. Alcázar Navarrete, Bernardino

- Director of the Congress Committee. Spanish Society of Pulmonology and Thoracic Surgery
- Specialist Pulmonology Physician at the Public Health Business Agency Hospital de Poniente.
- Coordinator of the COPD department of SEPAR (Spanish Society of Pulmonology and Thoracic Surgery).
- Member of the Executive Committee of COPD at SEPAR.
- Member of the SEPAR Congress Committee.
- Treasurer of the Pulmonology Association of the South (Neumosur)
- Degree in Medicine and Surgery from the University of Granada
- Doctor of Medicine from the University of Granada

Dr. González Barcala, Francisco Javier

- Cardiologist at the Jiménez Díaz Foundation University Hospital
- Specialist Physician at the Pontevedra Hospital
- Specialist Pulmonologist at the University Clinical Hospital of Santiago de Compostela, La Coruña
- Academic Stay at the Arnaud de Villeneuv University Hospital Center, France
- Specialist Physician at the General Hospital of Galicia
- Doctor of the Emergency Department and INSALUD for the Galician Health Service.
- Doctor of Medicine and Surgery from the University of Santiago de Compostela
- Member of: European Academy of Allergy and Clinical Immunology, European Respiratory Society, Spanish Society of Pneumology and Thoracic Surgery, Galician Society of Respiratory Diseases

Dr. Calle Rubio, Myriam

- Chief of Section of the Pulmonology Department of the Clinical Hospital San Carlos, Madrid
- Specialist in Pulmonology at the General University Hospital Gregorio Marañón, Madrid
- Associate Professor of Health Sciences, Faculty of Medicine, Complutense University of Madrid
- Doctor of Medicine from the Complutense University of Madrid.
- Bachelor's Degree in Medicine and Surgery from the Autonomous University of Madrid
- President of the Neumomadrid Congress Committee
- Member of: SEPAR Quality of Care Committee, Scientific Committee of the Spanish COPD Guide, Executive Committee of the SEPAR COPD IIP, Follow-up Commission of the Spanish National Health System COPD Strategy

Dr. España Yandiola, Pedro Pablo

- Specialist in Pulmonology
- Head of the Medical Service of the Department of Pulmonology at the Galdakao-Usánsolo Hospital
- Director of the Integrated Infection Research Program of the Spanish Society of Pulmonology and Thoracic Surgery.
- Author of numerous specialized publications in renowned journals.
- Doctor of Medicine and Surgery from the University of the Basque Country
- Bachelor's Degree in Medicine and Surgery from the University of the Basque Country
- Postgraduate Master's Degree in Clinical Unit Management

Dr. Bellón Alonso, Sandra

- Specialist in the Pediatrics Service and the Pediatric Pulmonology Unit at the Gregorio Marañón University Hospital, Madrid.
- Bachelor's Degree in Medicine and Surgery, Faculty of Medicine, University of Oviedo
- Degree in Medical Surgeon from the Central University of Venezuela.

Dr. Girón Matute, Walther Iván

- Specialist Physician in Pulmonology at Hospital Vithas Madrid La Milagrosa, Madrid
- Medical Specialist in Pulmonology Consultation at the Hospital Beata María Ana Hermanas, Madrid
- Specialist in Pulmonology Consultation at the University Hospital Sanitas Virgen del Mar
- Specialist in Pulmonology Consultation at the Polyclinic Arapiles HM Hospitals Madrid, Specialist Physician in Pulmonology Consultation at the Gregorio Marañón General University Hospital, Madrid
- Specialist Physician in Pulmonology at Hospital Vithas Madrid La Milagrosa, Madrid
- Bachelor's Degree in Medicine from the National Autonomous University of Honduras, Master's Degree in Diagnosis and Treatment of Sleep Disorders from the Catholic University of San Antonio
- Master's Degree in Infectious Diseases and Treatment from the CEU Cardenal Herrera University
- Member of: Madrid Society of Pulmonology and Thoracic Surgery (NEUMOMADRID) and Spanish Society of Pulmonology and Thoracic Surgery (SEPAR)

06

Structure and Content

Made up of several teaching modules, this syllabus is a must for all those professionals who wish to acquire the most advanced knowledge in the field of Precision Pulmonology. It analyzes in depth the use of Genomic Medicine techniques to address specific diseases such as Cystic Fibrosis, COPD or Asthma. All these contents will be available on a 100% online learning platform, with no fixed schedules or evaluation cycles. In this way, the student will be able to choose where and when to approach the topics and thereby complete in a personalized way the 1,800 educational hours that make up the theoretical phase of this degree.

Consolidate your mastery of the contents of this Hybrid Professional Master's Degree thanks to innovative teaching methods such as Relearning"

Module 1. Personalized Precision Medicine and Big Data in Pulmonology Prelude

1.1. Ethics of Precision Medicine
1.2. Advantages
  1.2.1. Disadvantages of Precision Medicine
1.3. Precision Medicine as a strategy
1.4. The Big Data Revolution
1.5. Real-Life Studies
  1.5.1. Advantages
  1.5.2. Inconveniences
1.6. Pharmacogenomics
1.7. Proteomics
1.8. Chronicity
  1.8.1. Personalization of Care
1.9. Telemedicine
1.10. Personalized Care for Dependents
  1.10.1. The Role of Nursing Staff

Module 2. Interventional Pulmonology and Precision Medicine

2.1. Linear Endobronchial Ultrasound (EBUS-endobronchial Ultrasound)
  2.1.1. Its Role in the Genetic Diagnosis and Most Precise Stadification of Lung Cancer
2.2. Radial Endobronchial Ultrasound (r-EBUS)
  2.2.1. Its Role in the Diagnosis or Peripheral Lesions and the Genetic Typification of Lung Cancer
2.3. Electromagnetic Navigation
  2.3.1. Its Role in the Diagnosis and Treatment of Peripheral Lesions
2.4. Narrow Band Imaging Bronchoscopy in Bronchoscopic Examination for Suspected Bronchial Neoplastic Disease
2.5. Endobronchial Therapy of Treatable Features
  2.5.1. Homogeneous Emphysema with Intact Cysura
2.6. Endobronchial Therapy of Treatable Traits, Homogeneous Emphysema with Interlobar Communication
2.7. Endobronchial Therapy of Treatable Features
  2.7.1. Non-Eosnophilic Asthma
2.8. Detection of Diagnostic Markers in the Malignant Pleural Pathology With Minimally Invasive Techniques
2.9. Medical Thoracoscopy
  2.9.1. Contribution to the Diagnostic Precision of Pleural Effusion
  2.9.2. Alveoloscopy: "In Vivo" Analysis of the Peripheral Airways

Module 3. Precision Medicine, Imaging Techniques and Pulmonary Function

3.1. Quantification of Obstructive Pulmonary Impairment by Chest Computed Tomography Applied as a Tool for Increasing Diagnostic Accuracy
3.2. Lung Nodule Volumetry Applied as a Tool for Increasing Diagnostic Accuracy
3.3. Elastography of Lung Lesions
  3.3.1. Pleurals as a Tool for Increasing Diagnostic Accuracy
3.4. Pleural Ultrasound Applied as a Tool to Increase Diagnostic Accuracy
3.5. Detection of Treatable Feature in Respiratory Diseases
  3.5.1. Hyperinflation (Lung Volumes, Dynamic Hyperinflation)
3.6. Detection of Treatable Feature in Respiratory Diseases
  3.6.1. Pulmonary Resistances
  3.6.2. Peripheral Tract Involvement
3.7. Detection of Treatable Traits in Respiratory Diseases:
  3.7.1. Measurement of Physical Activity in the Personalization of Care and the Prognosis of Patients
3.8. Detection of Treatable Feature in Respiratory Diseases
  3.8.1. Adherence to Treatment
3.9. Detection of Treatable Feature in Respiratory Diseases
  3.9.1. Non-Invasive Detection of Bronchial Inflammation by Exhaled Nitric Oxide Fraction
3.10. Detection of Treatable Feature in Respiratory Diseases
  3.10.1. Non-Invasive Detection of Bronchial Inflammation With Induced Sputum

Module 4. Genetics, Precision Medicine and Pediatric Diseases

4.1. Cystic Fibrosis Epidemiology
  4.1.1. Genetic Basis
4.2. Cystic Fibrosis in Children
  4.2.1. Manifestations
4.3. Cystic Fibrosis in Children
  4.3.1. Screening and Treatment. Primary Ciliary Dyskinesia
4.4. Genetic Links to Respiratory Distress in Newborns
  4.4.1. Bronchopulmonary Dysplasia
4.5. Duchenne and Becker Muscular Dystrophy
  4.5.1. Genetic Basis
4.6. Duchenne and Becker Muscular Dystrophy
  4.6.1. Management and Prosistic
4.7. Respiratory Involvement of Sickle Cell Disease
4.8. Underweight at Birth and Respiratory Disease
4.9. Treatments Oriented to Specific Therapeutic Targets in Childhood Asthma
  4.9.1. Use of Biological Treatment in the Pediatric Population

Module 5. Genetics, Precision Medicine And Asthma

5.1. Epidemiology of Asthma
  5.1.1. Familial, Racial or Generational Associations
  5.1.2. Twin Studies
5.2. Genes Related to Asthma
  5.2.1. Localization 1
5.3. Genes Related to Asthma
  5.3.1. Localization 2
5.4. Inflammatory Pathways of Asthma
5.5. Precision Medicine in Asthma
  5.5.1. Anti IgE Antibodies
5.6. Precision Medicine in Asthma
  5.6.1. Anti IL5 Antibodies or IL5 Receptor
5.7. Precision Medicine in Asthma
  5.7.1. IL4/IL13 Antibodies
5.8. Precision Medicine and Other Biological Treatments in Asthma
  5.8.1. Anti-IL9, Anti-TNFalpha, Anti T-Lymphocyte Antibodies
5.9. Precision Medicine
  5.9.1. Current and Future Biomarkers
5.10. Precision Medicine in Asthma
  5.10.1. Linking Phenotypes to Specific Treatments

Module 6. Genetics, Precision Medicine and Lung Cancer

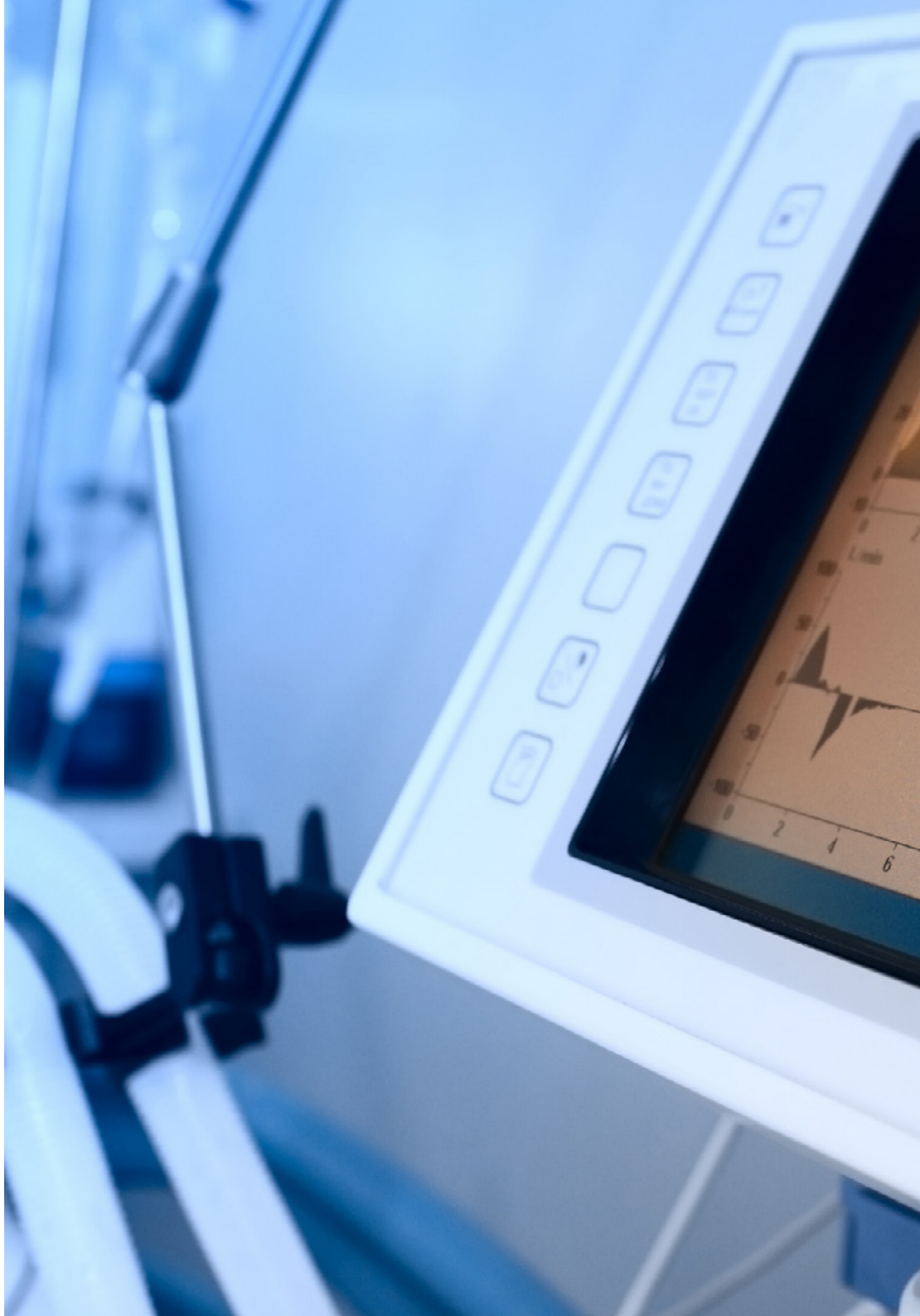
6.1. The Genetics of Lung Cancer Susceptibility
  6.1.1. Implications for Treatment
6.2. Molecular Biology of Adenocarcinoma of the Lung
  6.2.1. Driver Mutations
6.3. Molecular Biology of Squamous Cell Carcinoma of the Lung
  6.3.1. Sarcomatoid Carcinoma of the Lung
6.4. Molecular Biology of Microcytic Carcinoma of the Lung
6.5. Genomic Platforms for Lung Cancer Molecular Diagnostics and Fluid Biopsy
6.6. Driver Mutations as Therapeutic Targets
  6.6.1. EGFR Mutation
6.7. Driver Mutations as Therapeutic Targets
  6.7.1. ALK Translocation
6.8. Driver Mutations as Therapeutic Targets
  6.8.1. Others (ROS1, MET, RET, BRAF, NTRK)
6.9. Treatment Against Therapeutic Targets in Research
  6.9.1. HER2, NRG1 y KRAS
6.10. Precision Medicine in Lung Cancer
6.10.1. Global Strategy for the Management of Lung Cancer Linked to Therapeutic Targets

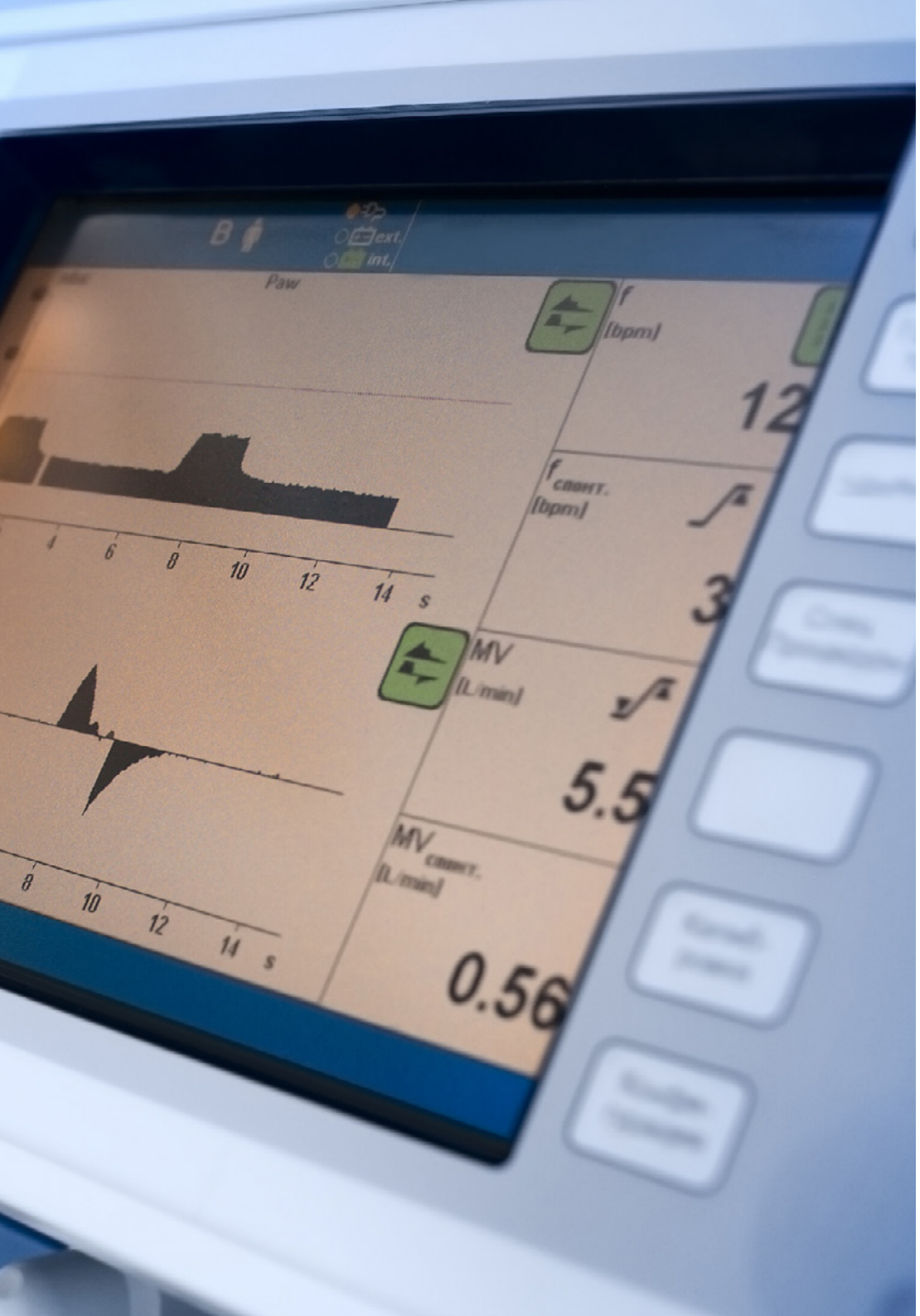
Module 7. Genetics, Precision Medicine and COPD

7.1. Genetic Links of COPD
7.2. Genetics of Alpha1 Deficiency
  7.2.1. Antitrypsins
7.3. Epidemiology of Alpha 1 Antitrypsin Deficiency
7.4. Manageemnt of Alpha 1 Antitrypsin Deficiency
  7.4.1. Genetic Counselling Treatment
7.5. COPD and Underweight at Birth
  7.5.1. COPD Trajectories
7.6. Genetics of Smoking
7.7. COPD Phenotypes
  7.7.1. Biomarkers
7.8. Personalized Medicine
  7.8.1. Treatment Oriented to Phenotypes
7.9. Sarcopenia
  7.9.1. Intolerance to Exercise
  7.9.2. Physical Inactivity
  7.9.3. Sedentary Behavior
7.10. Association of Polymorphisms in ACTN3 Genes
  7.10.1. ACE and PPARGC1A with the Effectiveness of Physical Training

Module 8. Genetics, Precision Medicine and Other Respiratory Diseases

8.1. Link Between Interstitial Lung Diseases and Genetics
8.2. Link Between Pulmonary Hypertension and Genetics
8.3. Genetic Basis of the Susceptibility of Hypoxemia in COPD
8.4. Genetic Disorders that Increase Susceptibility to Venous Thrombo Embolic Disease and Pulmonary Thromboembolism
8.5. Cystic Fibrosis in Adults
  8.5.1. Suspected and Diagnosis
8.6. Genetic Aspects of Obstructive Sleep Apneas Syndrome
8.7. Telomeres and Respiratory Diseases
8.8. Genetic Variability in Susceptibility and Severity of Pneumonia
8.9. Vaccines Based on mRNA
  8.9.1. Results and Secondary Effects in SARS-COVID-19 For Example





Module 9. Big Data and Respiratory Diseases I

9.1. Big Data and Epidemiology of Respiratory Diseases
9.2. Big Data and Bronchoscopy
9.3. Big Data and Non-Invasive Mechanical Ventilation
9.4. Big Data and Invasive Mechanical Ventilation
9.5. Big Data and Smoking
9.6. Big Data and Air Pollution
9.7. Big Data and Asthma
9.8. Big Data and COPD
9.9. Big Data and Sleep Apnea-Hypopnea Syndrome
9.10. Big Data and Obesity-Hypoventilation Syndrome

Module 10. Big Data and Respiratory Diseases II

10.1. Big Data and Community-Acquired Pneumonia
10.2. Big Data and Nosocomial Infection
10.3. Big Data and Tuberculosis
10.4. Big Data, Environmental Pollution and Respiratory Infections
10.5. Big Data and COVID-19
10.6. Big Data, Pleural Diseases and Lung Cancer
10.7. Big Data and Interstitial Lung Diseases
10.8. Big Data and Thromboembolic Disease
10.9. Big Data and Pulmonary Hypertension
10.10. Big Data and Respiratory Diseases Starting in the Neonatal Period

07

Clinical Internship

In order to complete this degree, the pulmonologist must complete a practical and on-site stay in a hospital center of reference in the approach to respiratory diseases. During this internship, they will apply the theoretical contents acquired to real patients and with the help of the most advanced technology.

Acquire up-to-date training on how to identify biomarkers of respiratory diseases in samples taken from real patients in this practical and on-site internship"

The second part of this Hybrid Professional Master's Degree in Precision Pulmonology Genomics and Big Data consists of 3 weeks of on-site learning in a prestigious hospital center of international reference. The specialist will have to complete 8-hour consecutive shifts, from Monday to Friday, where they will apply the knowledge developed in the theoretical phase and will contribute to the diagnosis and treatment of real patients.

This educational stage will be supervised by an assistant tutor, who will be in charge of assigning new professional tasks and will analyze the correct execution of assistance procedures. At the same time, the pulmonologist will have the opportunity to interact with other experts and also learn about their professional methodologies for the approach of respiratory diseases from Genomic Medicine.

All the knowledge provided by this phase of studies is based on proven scientific evidence, although many of them are applied in a pioneering way in health institutions linked to TECH. In this way, the graduate will not only acquire a theoretical vision of the latest developments in the field, but will also be able to occupy a distinguished role in the clinical practice of this health branch.

The practical teaching will be carried out with the accompaniment and guidance of teachers and other fellow trainees who facilitate teamwork and multidisciplinary integration as transversal skills for medical practice (learning to be and learning to relate).

The procedures described below will be the basis of the specialization, and their realization will be subject to the center's own availability, its usual activity and workload, the proposed activities being the following:

Module	Practical Activity
Precision Genomics Techniques Applied to Pulmonology	Identify biomarkers associated with interleukin (IL)-6-dependent inflammatory pathways, such as C-reactive protein (CRP) and fibrinogen that indicate risk of chronic obstructive pulmonary disease (COPD)
	Sampling of biomarkers for asthma by specific methods such as broncho-alveolar lavage
	Extract genomic samples through the induced Sputum
	Implement biomarker studies of procalcitonin (PCT) and CRP to assess the propensity to develop pneumonia
	Apply studies on the patient's DNA, based on Comparative Genomic Hybridization, to find signs of respiratory disease
	Implement amplification techniques to obtain multiple copies of DNA and determine the existence of specific respiratory diseases
	Perform specific anatomopathological and molecular studies to identify signs of tumors in the respiratory tract
Pulmonary function studies and imaging techniques for genomic assessment of respiratory disease	Use high-resolution computed tomography (HRCT) to assess the impact of Cystic Fibrosis on lung function
	Assess lung parenchyma and all thoracic structures by X-rays
	Determine severe respiratory distress through ultrasound scans
	Appreciate the presence of tumor tissues or metastases by means of CT scans
Pulmonological interventionism and Precision Medicine for diagnosis and treatment	Perform one or several biopsies of the pleura with a special needle to obtain a genetic and precision diagnosis
	Indicate bronchoscopy studies to obtain a total cell count and airway remodeling
	Consider thoracic lung resection surgery after ruling out other therapeutic measures

Module	Practical Activity
Big Data and Respiratory Diseases	Collect information on respiratory infectious diseases
	Describe different COPD patient trajectories through data collected with Big Data
	Manage, thanks to Big Data, the different phenotypes and endotypes that determine the response of the asthmatic patient to specific treatments
	Correctly interpret the different predictive models obtained through the databases databases generated by Big Data.
Genetics, Precision Medicine and Lung Cancer	Apply immunotherapies based on specific molecular targets against lung cancer
	Indicate the use of drugs against EGFR mutations and directed to lung tumors

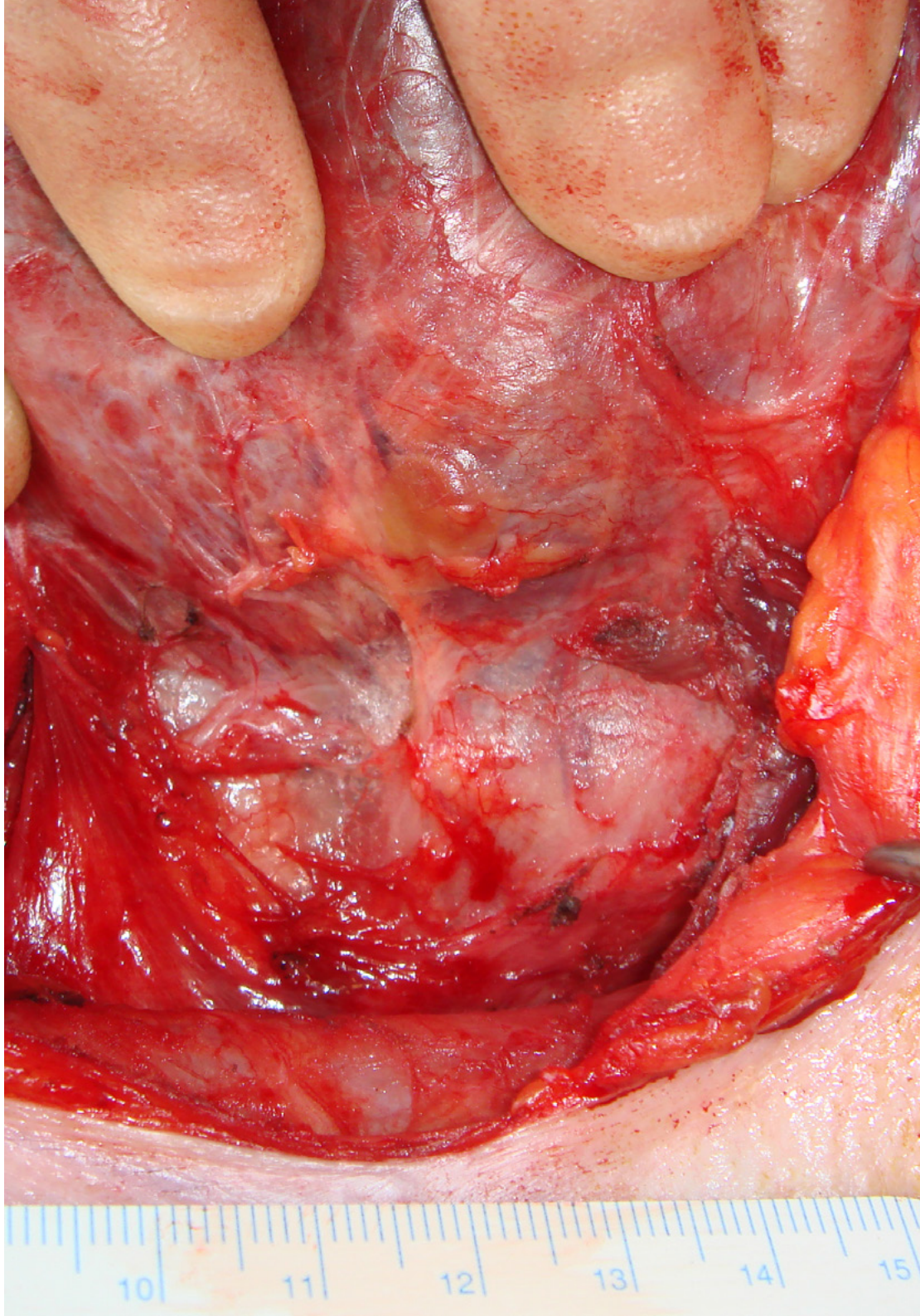
During this intensive on-site internship, they will develop a wide range of clinical activities, thereby achieving the best training through the care of real patients"

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

This liability policy for trainees will have broad coverage and will be taken out prior to the start of the practical internship period. In this way, professionals will not have to worry if they have to deal with an unexpected situation and will be covered until the end of the practical program at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the Internship Program period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Clinical Internship?

The on-site internship of this degree will take place in a medical institution equipped with the most modern technologies in the field of Precision Pulmonology. In these centers, the doctor will also find experts with extensive experience and capacity to handle the most modern techniques of Genomic Medicine. In this way, the graduate will be able to make the most of this experience, becoming a first class and prestigious specialist.

Complete this excellent on-site internship and you will consolidate in a practical way the theoretical knowledge provided by this Hybrid Professional Master's Degree"

The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:

Hospital HM Modelo

Country: Spain
City: La Coruña

Address: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Anaesthesiology and Resuscitation
- Spine Surgery

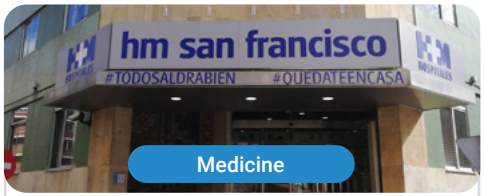
Hospital HM Rosaleda

Country: Spain
City: La Coruña

Address: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Hair Transplantation
- Orthodontics and Dentofacial Orthopedics



Hospital HM San Francisco

Country: Spain
City: León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Update on Anesthesiology and Resuscitation
- Nursing in the Traumatology Department

Hospital HM Regla

Country: Spain
City: León

Address: Calle Cardenal Landázuri, 2, 24003, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Psychiatric Treatments Update in Minor Patients

Hospital HM Nou Delfos

Country: Spain
City: Barcelona

Address: Avinguda de Vallcarca, 151, 08023, Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Aesthetic Medicine
- Clinical Nutrition in Medicine

Hospital HM Madrid

Country: Spain
City: Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Clinical Analysis
- Anaesthesiology and Resuscitation

Hospital HM Montepríncipe

Country: Spain
City: Madrid

Address: Av. de Montepríncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Child Orthopedics
- Aesthetic Medicine

Hospital HM Torrelodones

Country: Spain
City: Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Anaesthesiology and Resuscitation
- Hospital Pediatrics

Hospital HM Sanchinarro

Country: Spain
City: Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Anaesthesiology and Resuscitation
- Sleep Medicine

Hospital HM Puerta del Sur

Country: Spain
City: Madrid

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Pediatric Emergencies
- Clinical Ophthalmology

Policlínico HM Arapiles

Country: Spain
City: Madrid

Address: C. de Arapiles, 8, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Anaesthesiology and Resuscitation
- Pediatric Dentistry

Policlínico HM Cruz Verde

Country: Spain
City: Madrid

Address: Plaza de la Cruz Verde, 1-3, 28807, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Advanced Clinical Podiatry
- Optical Technologies and Clinical Optometry

Policlínico HM Gabinete Velázquez

Country: Spain
City: Madrid

Address: C. de Jorge Juan, 19, 1° 28001, 28001, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Clinical Nutrition in Medicine
- Aesthetic Plastic Surgery

Policlínico HM Matogrande

Country: Spain
City: La Coruña

Address: R. Enrique Mariñas Romero, 32G, 2º, 15009, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Sports Physiotherapy
- Neurodegenerative Diseases

Policlínico HM Rosaleda Lalín

Country: Spain
City: Pontevedra

Address: Av. Buenos Aires, 102, 36500, Lalín, Pontevedra

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Advances in Hematology and Hemotherapy
- Neurological Physiotherapy

09

Methodology

TECH is the world's first university to combine the ***case study*** methodology with ***Relearning***, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the academic process and gives them the leading role, adapting to their needs and leaving aside more conventional methodologies.

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career"

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.
The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

"At TECH you will NOT have live classes (which you might not be able to attend)"

The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"

Case Studies or Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.

Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.

A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

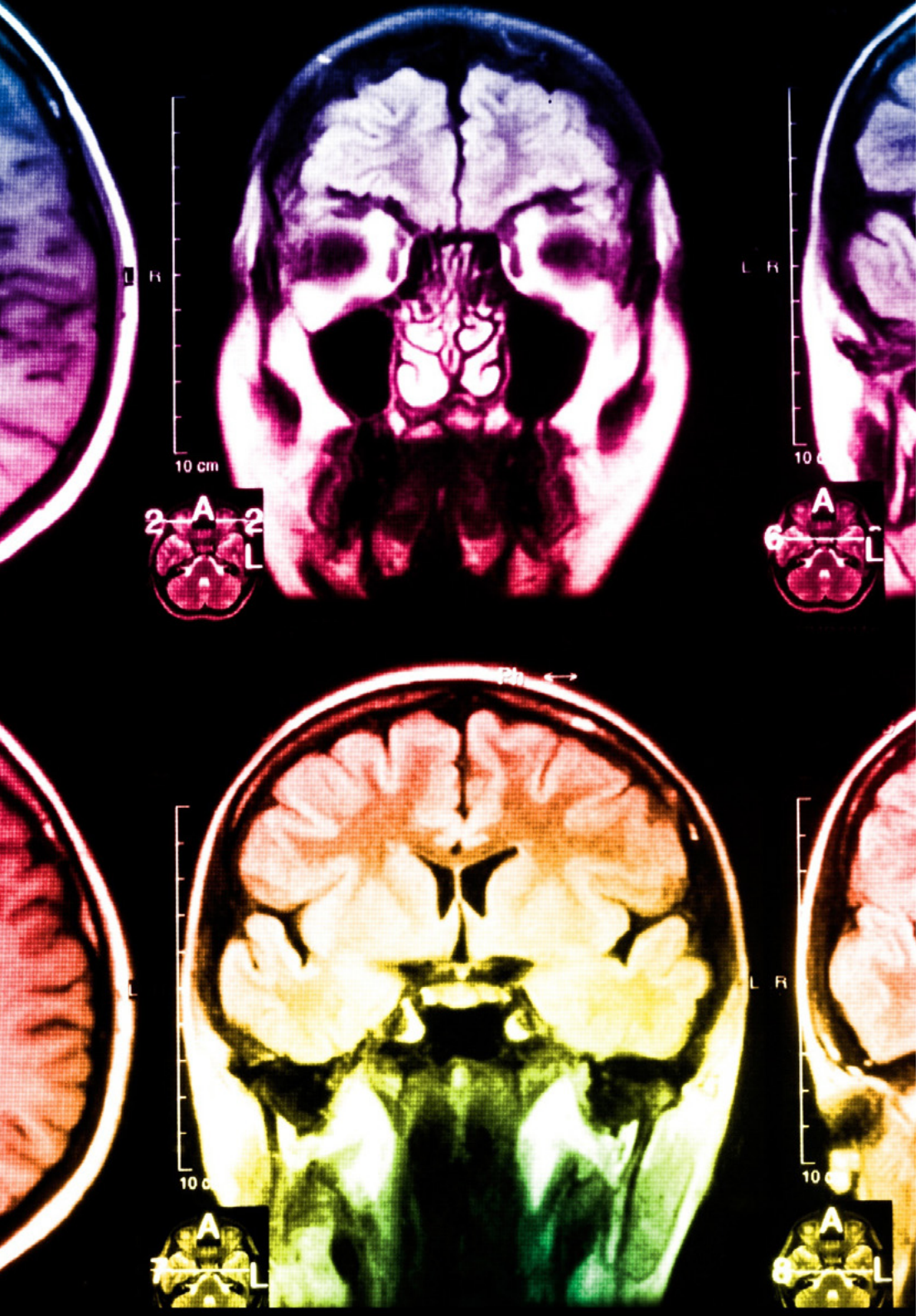
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.

"The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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 assess 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.



The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the quality of teaching, quality of materials, course structure and objectives is excellent. Not surprisingly, the institution became the best rated university by its students on the Trustpilot review platform, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

As such, the best educational materials, thoroughly prepared, will be available in this program:

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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.

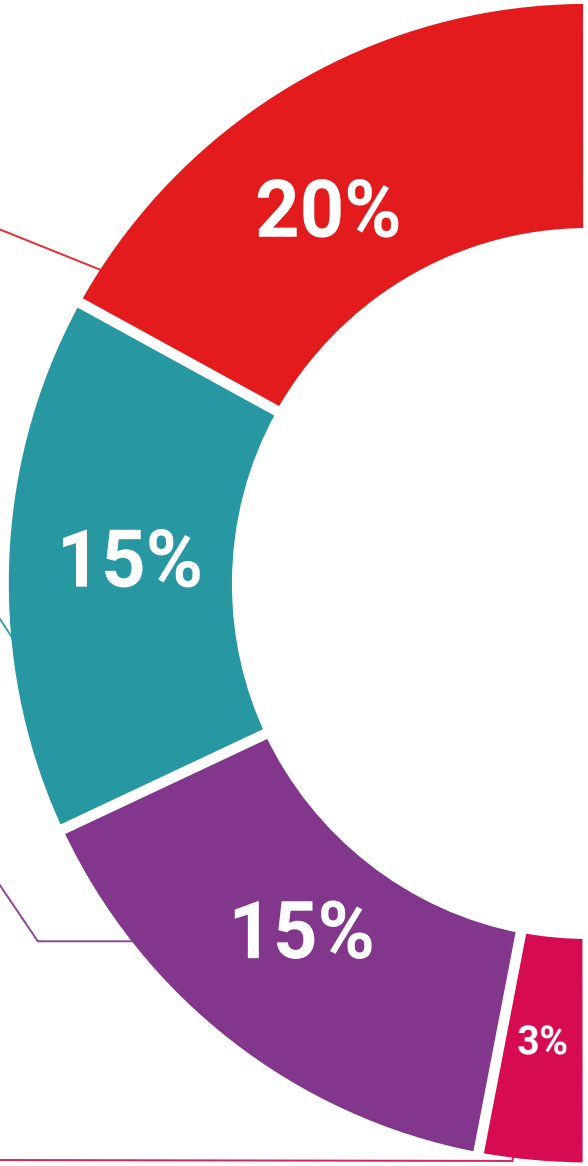
Interactive Summaries

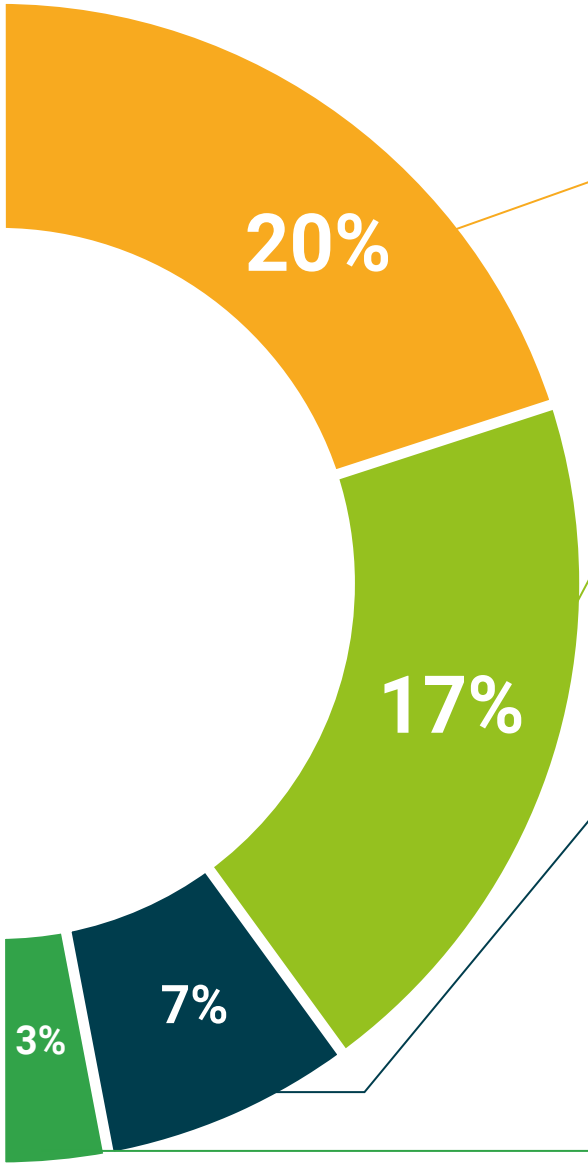
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best *case studies* in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

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 for 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.

10

Certificate

The Hybrid Professional Master's Degree in Precision Pulmonology Genomics and Big Data guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree diploma issued by TECH Global University.

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

This private qualification will allow you to obtain a**Hybrid Professional Master's Degree diploma in Precision Pulmonology Genomics and Big Data** 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.

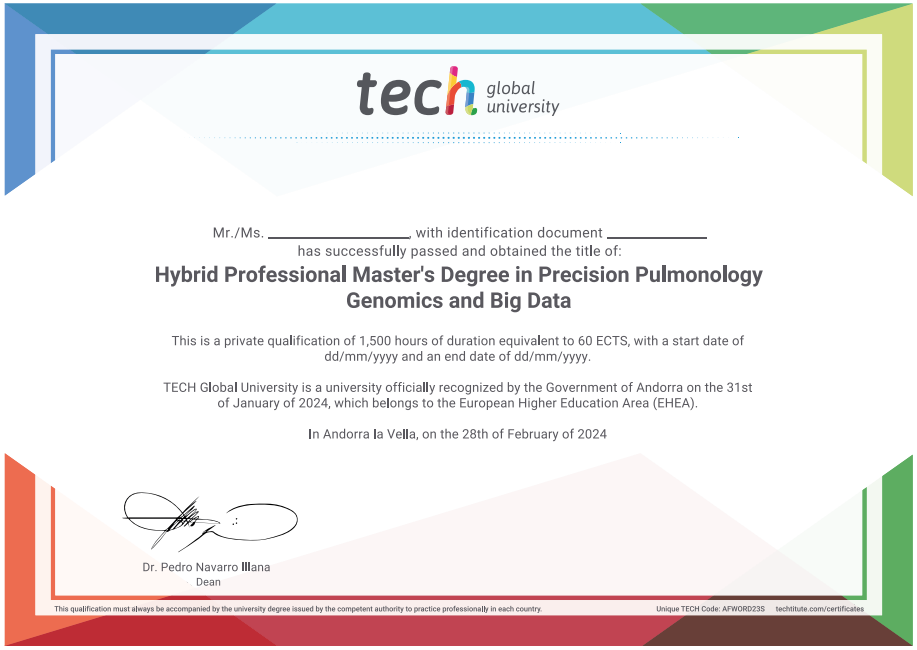
This **TECH Global University private qualification**, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Hybrid Professional Master's Degree in Precision Pulmonology Genomics and Big Data**

Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months.**

Credits: **60 + 4 ECTS**


tech global university

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

Hybrid Professional Master's Degree in Precision Pulmonology Genomics and Big Data

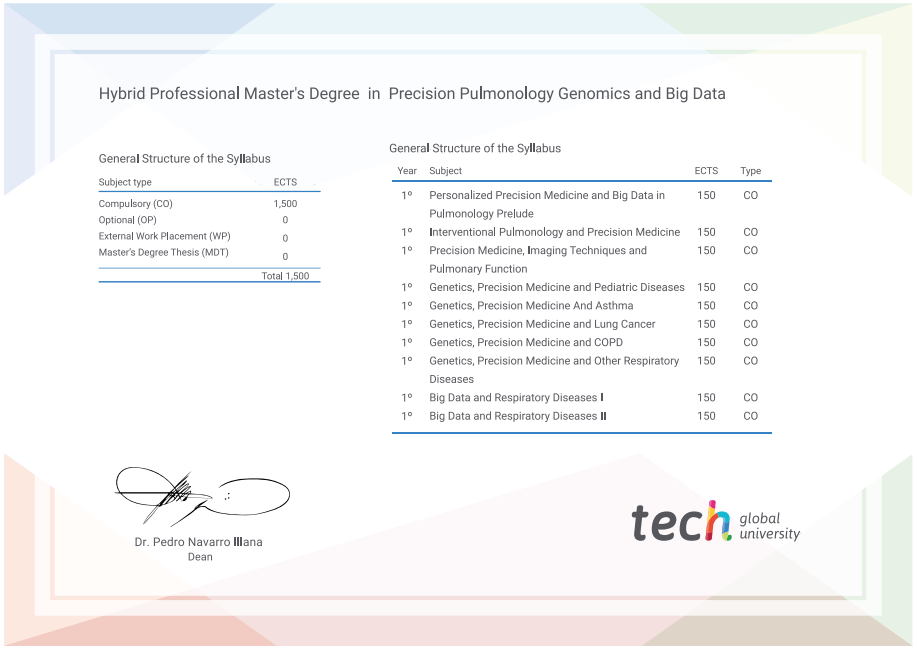
This is a private qualification of 1,500 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

Dr. Pedro Navarro Illana
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates


Hybrid Professional Master's Degree in Precision Pulmonology Genomics and Big Data

General Structure of the Syllabus

Subject type	ECTS
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 1,500

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Personalized Precision Medicine and Big Data in Pulmonology Prelude	150	CO
1º	Interventional Pulmonology and Precision Medicine	150	CO
1º	Precision Medicine, Imaging Techniques and Pulmonary Function	150	CO
1º	Genetics, Precision Medicine and Pediatric Diseases	150	CO
1º	Genetics, Precision Medicine And Asthma	150	CO
1º	Genetics, Precision Medicine and Lung Cancer	150	CO
1º	Genetics, Precision Medicine and COPD	150	CO
1º	Genetics, Precision Medicine and Other Respiratory Diseases	150	CO
1º	Big Data and Respiratory Diseases I	150	CO
1º	Big Data and Respiratory Diseases II	150	CO

Dr. Pedro Navarro Illana
Dean

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*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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Hybrid Professional Master's Degree

Precision Pulmonology
Genomics and Big Data

Modality: **Hybrid (Online + Clinical Internship)**
Duration: **12 months.**
Certificate: **TECH Global University**
Credits: **60 + 4 ECTS**

Hybrid Professional Master's Degree

Precision Pulmonology
Genomics and Big Data

tech global university