

Hybrid Master's Degree

Update on Oncologic
Pathology for Pathologists





Hybrid Master's Degree Update on Oncologic Pathology for Pathologists

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 créditos ECTS

Website: www.techtute.com/us/medicine/hybrid-master-degree/hybrid-master-degree-update-oncologic-pathology-pathologists

Index

01

Introduction

p. 4

02

Why Study this Hybrid
Master's Degree?

p. 8

03

Objectives

p. 12

04

Skills

p. 20

05

Course Management

p. 24

06

Educational Plan

p. 32

07

Clinical Internship

p. 44

08

Where Can I Do the Clinical
Internship?

p. 50

09

Methodology

p. 56

10

Certificate

p. 64

01

Introduction

The most current scientific and technological research in the area of Oncologic Pathology has allowed the development of much more advanced therapeutic strategies adjusted to the molecular and immunological response of cancer patients. However, not all pathologists manage to keep abreast of these developments or develop a holistic understanding of the practical applications of these methodologies. For this reason, TECH has designed this study that combines, with excellence, a theoretical learning phase in which the doctors will analyze recently discovered concepts, with a first level practical stay where they will apply these skills. This second phase distinguishes the program from any other in the market, as it offers professionals the opportunity to be ready to deploy their competencies in any work scenario.



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Throughout this Hybrid Master's Degree in Update in Oncologic Pathology for Pathologists, you will delve into the histological and molecular details of the main tumors of the head and neck"

In recent decades, Anatomic Pathology has extended its functions by providing much more specialized care for the living patient. Now, thanks to scientific and technological advances derived from different researches, this medical branch can diagnose malignant tumors more effectively or rule them out. Furthermore, this area of knowledge has been revolutionized by strategic techniques that allow the professional to know, in advance and by molecular and genetic means, what the patient's response to a given treatment will be. This element constitutes one more step in the health sciences towards the achievement of Precision Medicine in which cancer can be fought in the most effective way and even anticipate its appearance. Although pathologists should be at the forefront of this paradigm shift, not all of them are adequately up-to-date in this regard.

Aware of this scenario, TECH has developed a study program that combines practical and theoretical learning on these issues. The Hybrid Master's Degree in Update in Oncologic Pathology for Pathologists is distinguished from its counterparts in the educational market by its structure, divided into two distinct parts. During the first one, the student will delve into the histological features of tumors located in different parts of the body. In turn, it will investigate the most recent tests and techniques for diagnosis. Likewise, they will also delve into Toxicology for surgical pathologists and its links with forensic medicine.

Then, in a practical and in-person stay, the physician will be received in highly prestigious hospitals. From these facilities, you will implement all the procedures discussed above. For the correct execution of all of them, you will be supervised by an assistant tutor who will strive to strengthen your educational progress over the course of 3 intensive weeks. Upon completion of both phases, the pathologists will have the most required competencies within their professional field and will be able to put into practice the most innovative diagnostic methods in their daily work practice.

This **Hybrid Master's Degree in Update on Oncologic Pathology for Pathologists** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Development of more than 100 clinical pathologist cases with a high qualification in the identification of oncological conditions
- ♦ 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
- ♦ Development of cytologies and biopsies for the approach of complex tumors in different areas of the human body
- ♦ Application of complementary methods and techniques such as immunohistochemical stains, immunofluorescence, molecular biology techniques (FISH, PCR, RT-PCR) and electron microscopy to offer complete evaluations to patients at risk for cancer
- ♦ Clinical and pathological practice guidelines on the determination of precise techniques according to the body area involved by lesions and neoplasms
- ♦ All of 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

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The practical and immersive stay of this program will allow you to deal with real patients, under suspicion of cancer, in a direct and 100% practical way"

In this proposal for a Master's Degree, of a professionalizing nature and hybrid learning modality, the program is aimed at updating the professional in Anatomic Pathology. The contents are based on the latest scientific evidence, and oriented in a teaching way to integrate the theoretical knowledge of this medical practice where it is essential to have theoretical and practical skills to choose the diagnostic method that best suits specific oncological problems.

Thanks to their multimedia content developed with the latest educational technology, they will allow the medical professional to obtain situated and 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 professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

This program is characterized by a program where you will determine the presence or absence of oncological pathologies through the most modern techniques and tools.

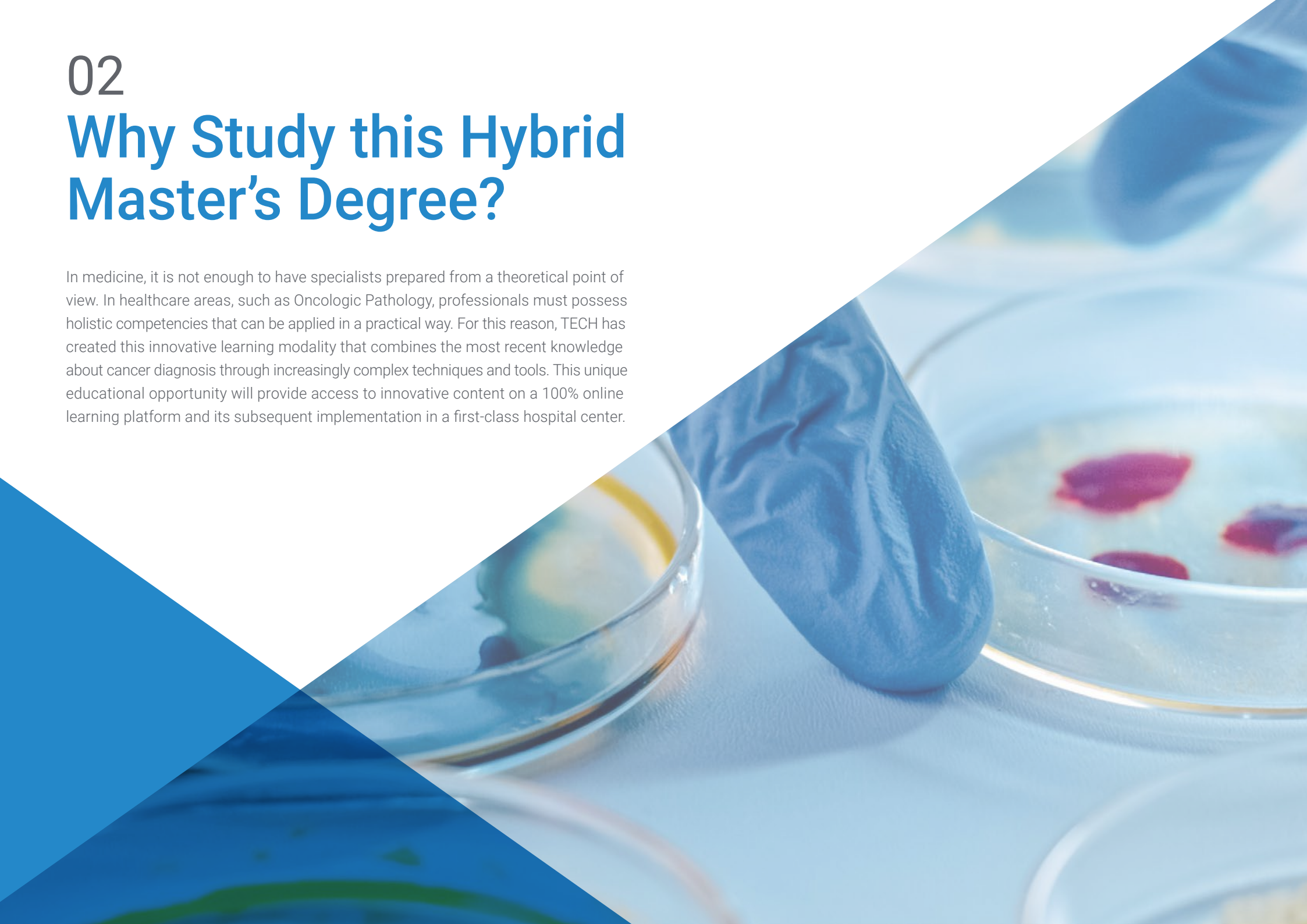
You will develop, during this program, a broad practical and theoretical knowledge about the risk factors that most affect the appearance of different types of tumors today.



02

Why Study this Hybrid Master's Degree?

In medicine, it is not enough to have specialists prepared from a theoretical point of view. In healthcare areas, such as Oncologic Pathology, professionals must possess holistic competencies that can be applied in a practical way. For this reason, TECH has created this innovative learning modality that combines the most recent knowledge about cancer diagnosis through increasingly complex techniques and tools. This unique educational opportunity will provide access to innovative content on a 100% online learning platform and its subsequent implementation in a first-class hospital center.



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This high-level program will allow you to learn about the latest developments in the morphological, molecular and radiological diagnosis of oncological Selar and Suprasellar lesions"

1. Updating from the Latest Technology Available

In this educational syllabus, TECH will update the pathologist on the latest developments related to the discovery and use of molecular biomarkers for the detection of cancer. They will also delve into the search for specialized treatments and therapeutic instruments according to the genetic characteristics of the patients.

2. Gaining In-depth Knowledge from the Experience of Top Specialists

This Hybrid Master's Degree will have the assistance of great experts in Oncologic Pathology at all times. In the first educational phase, it will be the teachers who will offer their specialized guidance. Then, during the practical stay, the pathologists will be supported by prestigious professionals based in the hospital that will host them for this training program.

3. Entering into first-level-class hospital environments

TECH has carefully selected the medical facilities that will host its students during the 3-week internship included in this program. These institutions have a high prestige thanks to the health personnel working in them and their high specialization in the area of Oncologic Pathology.



4. Combining the Best Theory with State-of-the-Art Practice

This program breaks several schemes in the current pedagogical market, where there is a prevalence of programs with little focus on proper teaching training. TECH wants to combat this reality by presenting a novel learning model, 100% practical and that facilitates the access of health professionals to renowned health institutions. From this kind of in-person stay, its graduates will have the most requested experiences for the diagnosis and treatment of Oncologic Pathologies.

5. Expanding the Boundaries of Knowledge

During this Hybrid Master's Degree, the students will have access to international high schools located in different latitudes. This availability will facilitate student access to different standards and modalities of care. In this way, they will expand their employment horizons and enhance their resumes with a career path that is unparalleled in today's educational market.

“*You will have full practical immersion at the center of your choice*”



03 Objectives

The design of this program, composed of two distinct educational stages, allows the physician to achieve many academic objectives. On the one hand, you will assimilate up-to-date contents, 100% online, on a theoretical platform that will not force you to comply with rigid learning schedules. At the same time, the student will apply everything studied in a first-level practical stay in prestigious medical centers. The combination of both will provide pathologists with the most advanced competencies in the area of Oncologic Pathology and will challenge them to apply the most innovative procedures for this type of medical approach.



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Enroll in TECH and you will be up-to-date on the symptoms and signs most frequently associated with cancer and how to check for the presence of malignant lesions"



General Objective

- The general objectives of this Hybrid Master's Degree in Update in Oncologic Pathology for Pathologists are focused, first of all, on the use and management of the most advanced medical technology. Upon completion of the program, the professional is expected to have the most complex skills for this management. In addition, they must perform an adequate interpretation of the data obtained in the diagnostic tests and, in this way, improve their daily work by means of the latest resources available for the treatment of malignant tumors





Specific Objectives

Module 1. Cancer General Aspects. Risk Factors

- ◆ Recognize the characteristics of malignant neoplasms, their classification, according to their histogenesis, as well as aspects related to their biological behavior
- ◆ Acquire up-to-date knowledge on cancer epidemiological data worldwide
- ◆ Learn about screening methods in at-risk populations to diagnose cancerous lesions early
- ◆ Recognize the susceptibility genes involved in breast, lung, thyroid, colon, skin, bone, pancreatic, and neuroblastoma cancers, and by what mechanism they participate in tumorigenesis

Module 2. Molecular Basis of Cancer

- ◆ Recognize the environmental and occupational factors (mutagenic agents) that are directly and indirectly involved in cancer, and the carcinogenic capacity of some toxic substances found in food
- ◆ Relate DNA and RNA viruses known to cause cancer in humans
- ◆ Expose the mechanisms by which viruses are able to subjugate the normal activity of host cytoplasmic proteins, affecting key points in the control of the cell cycle, cell growth and differentiation, causing severe alterations in cell growth and cancer development
- ◆ Recognize the role of H pylori bacteria in the pathogenesis of gastric cancer
- ◆ Understand cancer as a genetic disease resulting from mutations that accumulate in genes that are critical for the growth and development of somatic cells
- ◆ Describe the genes associated with cancer, and the importance of DNA analysis to identify individuals, detect predisposing gene polymorphisms, analyze mutations, and establish the diagnosis of cancer as a genetic disease
- ◆ Know the symptoms and signs that are most frequently related to cancer, as well as the different systems for the staging of tumor disease and their importance
- ◆ Know the phases of the cell cycle, the critical control points, as well as the genes involved in its regulation

- ♦ Explain the positive and negative feedback regulatory processes that contribute to cell cycle progression, and the significance of negative controls on cell cycle progression that are present during development, differentiation, senescence, and cell death, which play an important role in preventing tumorigenesis
- ♦ Identify the difference in gene expression between normal tissue and tumor tissue
- ♦ Know the stages involved in the transformation of a normal cell to a malignant cell
- ♦ Recognize the malignant phenotype as the result of a characteristic pattern of gene expression, alterations in the function of the human genome, leading to aberrant growth, dedifferentiation, invasion and metastasis
- ♦ Characterize the different genes involved in cell cycle regulation (growth-promoting genes, growth-inhibiting genes, genes that regulate apoptosis and genes that repair damaged DNA), and the mutations that alter them
- ♦ Explain the key role that oncogenes may play in the development of cancer by directing mechanisms that lead to the development of neoplasms
- ♦ Know tumor suppressor genes as cytoplasmic components capable of reversing the tumor phenotype; proteins that control the cell cycle, proliferation, and differentiation
- ♦ Identify epigenetic aberrations (DNA methylation with silencing of gene expression, and histone modifications that can enhance or dampen expression), which contribute to the malignant properties of cells
- ♦ Recognize the role of epigenetic changes in malignant phenotype, including gene expression, control of differentiation, and sensitivity and resistance to anticancer therapy
- ♦ Know the genes and proteins associated with malignant diseases and their utility as tumor markers to define a particular entity, its diagnosis, staging, prognosis, and screening in the population
- ♦ Know and apply the different technologies used to analyze the gene expression profile of neoplasms to identify clinical and biological aspects that are difficult to determine by histopathological examination; its principles, advantages and disadvantages

- ♦ Explain the importance of gene expression profiling for the application of different treatment protocols and the response to them among histologically similar tumors
- ♦ Recognize the importance of gene expression profiling in the new classifications of malignant tumors associated with prognosis and response to treatment

Module 3. Childhood Malignant Tumors

- ♦ Know the differences between CNS tumors in children and adults
- ♦ Study the importance of routine, special, and biomarker stains in Medulloblastoma
- ♦ Learn about the advances in the diagnosis of CNS embryonal tumors in pediatrics
- ♦ Acquire in-depth knowledge of the diagnosis and management of CNS pseudotumoral lesions in children

Module 4. Nervous System Tumours

- ♦ Acquire more in-depth knowledge of histological and molecular aspects of the adult CNS tumors with greater prevalence and clinical significance
- ♦ Recognize the important role of cell cycle checkpoints and DNA repair systems in maintaining the fidelity and integrity of genome replication and repair, and regulating cell cycle dynamics
- ♦ Acquire in-depth knowledge of the current diagnostic approach suggested by WHO and the CIMPACT-NOW consortium for the study of central nervous system tumors
- ♦ Acquire up-to-date knowledge of the morphological, molecular, and radiological diagnosis of sellar and suprasellar lesions

Module 5. Thoracic Cavity Organ Tumors

- ♦ Carry out an up-to-date review of the morphological knowledge and molecular pathology of the most frequent types of epithelial and non-epithelial thoracic cavity tumors
- ♦ Describe the relevant aspects of the diagnosis, prognosis, and differential diagnosis of the main epithelial and mesenchymal lung tumors
- ♦ Review relevant aspects of the diagnosis of lesions of each segment of the mediastinum
- ♦ Develop molecular diagnostic algorithms for lung and pleural cancer

Module 6. Female Breast Tumors

- ♦ Address, in-depth, the epidemiological and diagnostic aspects of breast cancer and its precursors
- ♦ Take a more in-depth look at the molecular classification of breast cancer
- ♦ Delve into the most important aspects, such as pre and post neoadjuvant breast assessment, as well as sentinel lymph node management

Module 7. Genitourinary Tract Tumors

- ♦ Gain in-depth knowledge of the causes and molecular and cellular mechanisms involved in pathophysiology
- ♦ Acquire an integrative vision in the diagnosis of neoplastic disease
- ♦ Check developments in the histopathologic classification of ovarian, vulvar, and uterine tumors
- ♦ Study the phenotypic expression patterns and molecular pathways involved in carcinogenesis

Module 8. Skin Tumors

- ♦ Acquire in-depth knowledge of cutaneous tumor pathology, learning and reviewing the morphological characteristics of the most frequent tumors
- ♦ Establish clinical-pathological correlation
- ♦ Sample management, from sample collection and preservation, to conventional staining, immunohistochemistry, and special laboratory and molecular pathology techniques

Module 9. Gastrointestinal Tract Tumors

- ♦ Acquire detailed knowledge of the molecular classification of stomach and colorectal cancer
- ♦ Delve at depth into carcinogenesis and morpho-molecular diagnosis of GISTs
- ♦ An in-depth look at the role of precursor lesions of the biliopancreatic system

Module 10. Hemolymphoid Tumors

- ♦ Gain more in-depth knowledge of the different types of systemic lymphomas and mature B and T neoplasms
- ♦ Address the difficulties in the histopathological diagnosis of Hodgkins lymphoma
- ♦ Learn about the morphological and molecular differences between benign and malignant lesions of the hemato-lymphoid system

Module 11. Cytological Diagnosis of Malignant Lesions

- ♦ Know the techniques of aspiration cytology of superficial and deep organs
- ♦ Know the cytologic patterns of malignancy, their differential diagnosis
- ♦ Understand the role of cytology in the clinical, therapeutic and research contexts in oncopathology

Module 12. Radiology as an Ally of Pathology in Oncologic Diagnosis

- ♦ Learn about aspects of the radiological diagnosis of the most common solid tumors in the body
- ♦ Learn about radiological techniques that are used in the functional study of malignant tumors
- ♦ Learn about the uses, contraindications, and complications of invasive diagnostic techniques performed by radiologists
- ♦ Know how to detect which radiological alterations are derived from antitumor treatment
- ♦ Possess detailed knowledge of the radiological techniques for monitoring tumor pathology

Module 13. Head and Neck Tumors

- ♦ Delve into the histological and molecular details of the major tumors of the head and neck, as well as the role of prognostic biomarkers in many of them
- ♦ Update and expand the knowledge of oral cancer precursor lesions, as well as tumor pathology of the oral mucosa and salivary glands through the study of the diagnostic difficulties of both histological and molecular characteristics of these diseases

Module 14. Soft Tissue Tumors

- ◆ Know the morphological, phenotypic, and molecular characteristics that characterize the various groups of sarcomas
- ◆ Describe the main differential diagnoses of each type of sarcoma considering its morphology (myxoid, spindle cell, epithelioid, round cell) and/or its anatomical location (superficial, deep, intra-abdominal, gynecological, etc).
- ◆ Describe the most important advances and new diagnostic techniques applied to the diagnosis of sarcomas

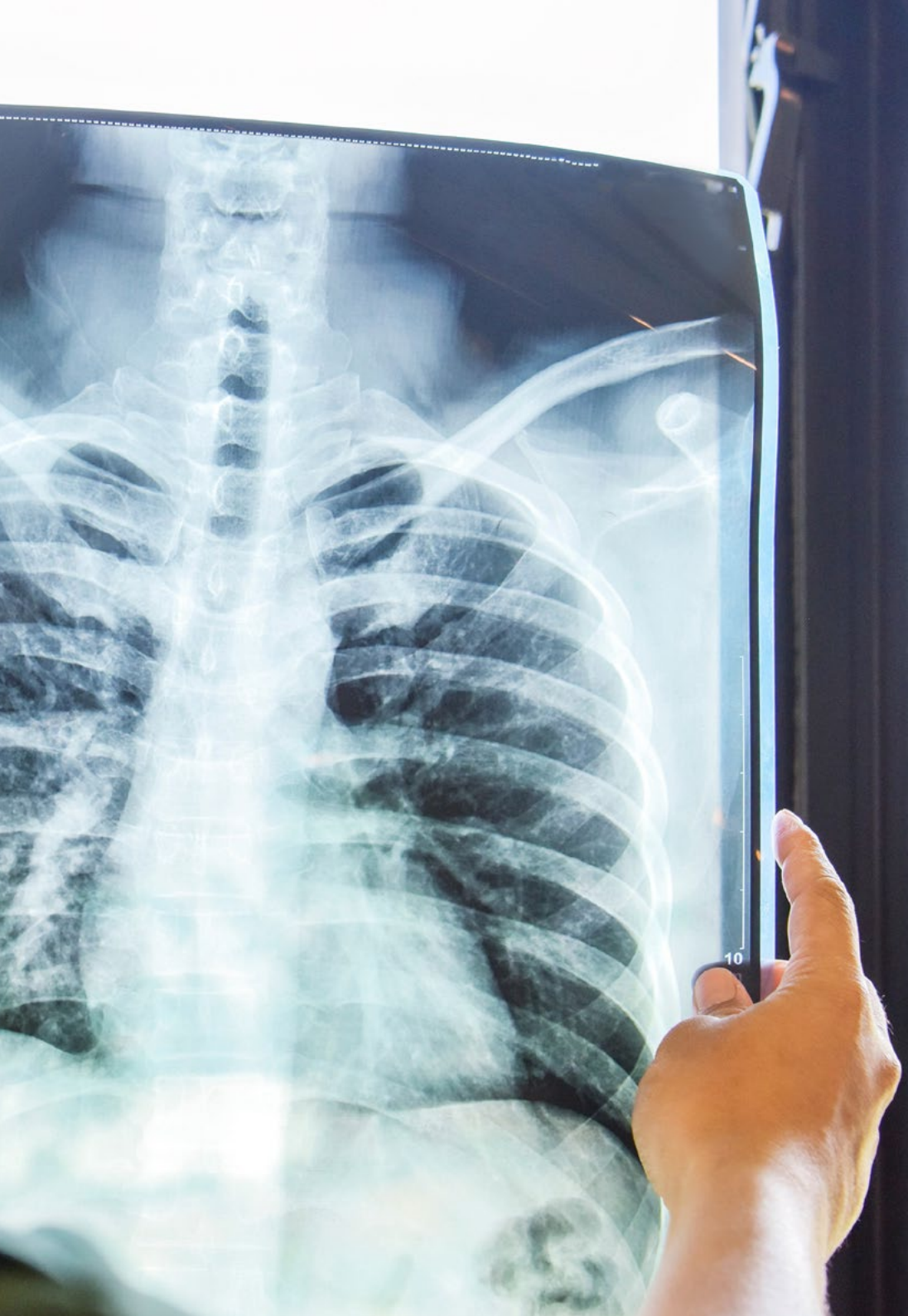
Module 15. Big Data in Anatomy Pathology

- ◆ Know the main problems in the management and structuring of data in pathology
- ◆ Introduction to the fundamentals of Big Data
- ◆ Identify opportunities for research and problem solving through Big Data, know its main utilities and limits
- ◆ Know the main methodologies most used in Big Data
- ◆ Know the main cloud tools for Big Data management and analysis

Module 16. Toxicology for Surgical Pathologists: Review of Some Relevant Issues in Daily Practice

- ◆ Define the basic and general concepts of toxicology as well as the types of intoxication
- ◆ Detect the main anatomopathological signs of death by intoxication
- ◆ Know the macroscopic and histological alterations caused by toxic substances in the body
- ◆ Provide information on the criteria justifying the reversion of a clinical autopsy to forensic medicine





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Through this Hybrid Master's Degree, you will master the most up-to-date classifications of malignant neoplasms, according to their histogenesis, as well as other discoveries related to their biological behavior"

04 Skills

After completing this Hybrid Master's Degree, the pathologists will be distinguished by their holistic handling of the most innovative tools and techniques in Oncologic Pathology. Through these competencies you will be able to tackle complex cases and achieve more accurate results that will earn you the respect of the scientific community and reliability in clinical practice.



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You will identify, during this program, opportunities for research and problem solving through Big Data in the area of Oncologic Pathology”



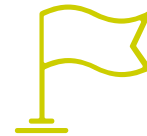
General Skills

- ♦ Recognize recent updates on scientific advances in the study of Oncologic Pathologies in order to put them into practice in the medical sector
- ♦ Master the knowledge about the general characteristics of tumors and the factors that determine their aggressiveness

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Thanks to this Hybrid Master's Degree, you will have specific professional criteria to indicate a clinical autopsy to the forensic doctor when there is suspicion of criminal death"





Specific Skills

- ◆ Recognize the incidence and prevalence of the disease worldwide and its different distribution in different populations
- ◆ Identify risk factors that influence the development of malignant tumors related to lifestyle and personal habits
- ◆ Identify the development of skills on the use of screening methods for the early diagnosis of cancerous lesions
- ◆ Develop general knowledge of the symptoms and warning signs of cancer and the staging systems of neoplastic disease and their importance
- ◆ Acquire knowledge of the main histological alterations side effects of antineoplastic drugs (adverse reactions) and their role in the mechanism of death

05

Course Management

For this Hybrid Master's Degree, TECH has summoned leading specialists in the research and diagnosis of Oncological Pathologies. All these experts are still active in this medical field, which has allowed them to gain extensive experience. Based on this trajectory, they have developed an ambitious syllabus where the main concepts, techniques and innovations of this scientific field are accumulated. In this way, these professors have provided a personalized guide that will facilitate the pathologist's rapid and flexible learning of the most complex concepts.



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This teacher's staff has composed a syllabus of excellence which includes the most updated contents on Oncologic Pathology"

International guest conductor

With more than 4 decades of professional career in the area of Pathology, Dr. Ignacio Wistuba is considered an international reference in this complex medical field. This prestigious researcher leads the Department of Translational Molecular Pathology at MD Anderson Cancer Center. He is also Director of the Khalifa Institute for Cancer Personalization, linked to the University of Texas.

In parallel, he directs the Thoracic Molecular Pathology Laboratory, the SPORE Lung Tissue Bank and the Institutional Tissue Bank. In turn, he is Director of the Biorepository and Pathology Core Network at the Eastern Cooperative Oncology Group, in conjunction with the American College of Radiology Imaging Network (ECOG-ACRIN).

One of the main lines of work of this pathologist in recent years has been Genomic and Precision Medicine. His multiple investigations in this field have allowed him to address the origin and complexities of different types of tumors, their incidence and their relationship with specific characteristics of the DNA of individuals. Specifically, he has delved into these issues in relation to lung neoplasms.

On the other hand, Wistuba maintains active research collaborations with other specialists from different parts of the world. An example of this is his participation in an exploratory analysis of cytokine levels in pleural fluid associated with immunotherapeutic protocols with the University for Development in Chile. He is also a member of global teams that, orchestrated by the Australian Royal Prince Alfred Hospital, have investigated different predictive biomarkers of lung cancer.

Likewise, the pathologist has sustained a continuous education since his initial studies in distinguished Chilean universities. Proof of this are his postdoctoral research internships in renowned institutions such as the Southwestern Medical Center and the Simmons Cancer Center in Dallas.



Dr. Wistuba, Ignacio

- ♦ President of the Department of Translational Molecular Pathology, MD Anderson Cancer Center
- ♦ Director of the Division of Pathology/Laboratory Medicine at MD Anderson Cancer Center
- ♦ Specialty Pathologist in the Department of Thoracic/Head and Neck Medical Oncology at the University of Texas Medical Center
- ♦ Director, UT-Lung SPORE Tissue Bank
- ♦ Lung Cancer Pathologist for the Lung Cancer Committee at Southwestern Oncology Group (SWOG)
- ♦ Principal Investigator on several studies conducted by the Cancer Prevention and Research Institute of Texas
- ♦ Principal Investigator of the Translational Genomics and Precision Cancer Medicine Training Program at NIH/NCI
- ♦ Postdoctoral Fellow at the Hamon Center for Therapeutic Oncology Research Center
- ♦ Postdoctoral Fellow at Southwestern Medical Center and Simmons Cancer Center
- ♦ Pathologist at the Catholic University of Chile
- ♦ Medical Graduate at Universidad Austral de Chile
- ♦ Member of:
 - Academy of American and Canadian Pathologists
 - Society for Cancer Immunotherapy
 - American Society of Clinical Oncology
 - American Society for Investigative Pathology
 - American Association for Cancer Research
 - Association for Molecular Pathology
 - Society for Pulmonary Pathology



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

Management



Dr. Rey Nodar, Severino

- ◆ Chief of the Anatomic Pathology Department of the UCV University Hospital
- ◆ President of the Spanish Foundation for Training and Research in Biomedical Sciences and Oncological Pathology
- ◆ Editor-in-Chief of international journals on Cancer and Tumors
- ◆ Author of several scientific publications on Oncopathology
- ◆ Chief Editor of Journal of Cancer and Tumor international
- ◆ D. from Bircham International University

Professors

Mr. Ballester Lozano, Gabriel

- ◆ Specialist in Molecular Biology in the Anatomical Pathology Service of the Ribera Salud Group
- ◆ Molecular Biologist at the Vinalopó University Hospital
- ◆ Molecular Biologist at the University Hospital of Torrevieja
- ◆ Degree in Marine Sciences and Orientation in Living Resources from the University of Alicante
- ◆ Master's Degree in Analysis and Management of Mediterranean Ecosystems from the University of Alicante
- ◆ Master's Certificate in Compulsory High School Education Teaching from the University of Alicante

Dr. Rubio Fornés, Abel

- ◆ Mathematics, Statistics and Business Process Management Specialist
- ◆ Manager and Partner of Chromemotion
- ◆ Freelance Programmer in several institutions
- ◆ Statistics Collaborator in Biostatistics at The Queen's Research Institute
- ◆ D. in Mathematics and Statistics from the University of Valencia
- ◆ Degree in Mathematics from the University of Valencia
- ◆ Master's Degree in Business Process Planning and Management from the University of Valencia



Dr. Abreu Marrero, Alette Rosa

- ◆ Imaging and Radiology Specialist
- ◆ Imaging Specialist at the Private Hospital of Maputo, Lenmed
- ◆ Professor of Radiology at the University of Medical Sciences of Camaguey
- ◆ Publication: Report of an atypical case of open-lipped schizencephaly

Dr. Buendía Alcaraz, Ana

- ◆ Specialist in Pathological Medicine at the General University Hospital Santa Lucía de Murcia
- ◆ Specialist of the Anatomic Pathology Service of the General University Hospital Los Arcos del Mar Menor in Murcia
- ◆ Degree in Medicine from the University of Murcia
- ◆ Master's Degree in Human Molecular Biology from the Catholic University San Antonio of Murcia (UCAM)

Dr. García Yllán, Verónica

- ◆ Specialist in Pathological Anatomy and Master in Medicine and Education

Dr. Aldecoa Ansorregui, Iban

- ◆ Member of the Pathology and Neuropathology Unit at the Hospital Clinic of Barcelona
- ◆ Neuropathologist and Neurologist at the August Pi i Sunyer Biomedical Research Institute
- ◆ Pathologist at the Sant Joan de Déu Maternity and Infant Hospital, Barcelona
- ◆ Medical Observer at the Surgical Neuropathology Unit, Johns Hopkins Hospital Baltimore, Maryland Area
- ◆ Doctor of Philosophy – PhD, Medicine and Translational Research
- ◆ Doctor of Medicine, UPV/EHU

Dr. Machado, Isidro

- ◆ Specialist in Pathological Anatomy at the Valencian Institute of Oncology Foundation (IVO)
- ◆ Specialist in the Pathology Department of Hospital Quirónsalud Valencia
- ◆ Doctor of Medicine from the Higher Institute of Medical Sciences of Villa Clara
- ◆ Expert in Soft Tissue Pathology and Sarcomas

Dr. Archila Sanz, Iván

- ◆ Specialist in Anatomic Pathology at Hospital Clínic de Barcelona
- ◆ Author of several national and international specialized publications
- ◆ Degree in Medicine from the Complutense University of Madrid

Dr. Fernández Vega, Iván

- ◆ Director of the Principality of Asturias Brain Bank at the Central University Hospital of Asturias
- ◆ Specialist in General Pathology and Neuropathology at the University Hospital of Araba
- ◆ Coordinator of the Brain Bank of the University Hospital of Araba
- ◆ Researcher at the University Institute of Oncology (IUOPA)
- ◆ Doctor of Medicine, University of Oviedo
- ◆ Specialty in Histopathology at the Central University Hospital of Asturias

Dr. Sansano Botella, Magdalena

- ◆ Specialist in the Pathological Anatomy Service of the Vinalopó University Hospital
- ◆ Degree in Criminology at the Alicante University
- ◆ Technician specializing in Anatomy and Pathology, Alicante University





Dr. Serrano Jiménez, María

- ◆ Specialist in the Pathological Anatomy Service of the Hospital del Vinalopó
- ◆ Teacher Tutor in the Pathology Anatomy Service of the Vinalopó Hospital

Dr. Camarasa Lillo, Natalia

- ◆ Medical Specialist in Anatomic Pathology
- ◆ Specialist in Pathological Anatomy at the General University Hospital of Castellón
- ◆ Specialist in Pathological Anatomy at the University Hospital Doctor Peset
- ◆ Author of several national and international specialized publications

Dr. Sua Villegas, Luz Fernanda

- ◆ Director of several pathology laboratories at the University Hospital Valle del Lili Foundation
- ◆ Director of the Pulmonary and Mediastinal Pathology, Lung Transplant Pathology and Rapid Room Evaluation (ROSE) Laboratories at the University Hospital Valle del Lili Foundation
- ◆ Medical Director of the Special Hematology and Hemostasis Service of the University Hospital Valle del Lili Foundation
- ◆ PhD in Biomedical Sciences with emphasis in Solid Tumor Genomics from the University of Valle
- ◆ Specialist in Anatomic Pathology and Clinical Pathology, University of Valle del Cauca
- ◆ Postgraduate degree in Medical Genetics from the University of Valencia
- ◆ Member of: Colombian Association of Pathology (ASOCOLPAT), Colombian Association of Mastology (ACM), American Thoracic Association (ATS), Latin American Thoracic Association (ALAT), International Association for The Study of Lung Cancer (IASLC)

Dr. Cuatrecasas, Miriam

- ◆ Specialist in Anatomic Pathology at the Hospital Clinic of Barcelona
- ◆ Expert and Consultant in Gastrointestinal Pathology
- ◆ Coordinator of the Digestive Pathology SEAP working group
- ◆ Coordinator of the Tumor Bank Network of Catalonia (XBTC) and the Tumor Bank of the Hospital Clinic-IDIBAPS
- ◆ IDIBAPS researcher
- ◆ Doctor in Medicine and Surgery from the Autonomous University of Barcelona
- ◆ Degree in Medicine and Surgery, Autonomous University of Barcelona
- ◆ Specialty in Anatomic Pathology at the Santa Creu i Sant Pau Hospital

Dr. Rojas, Nohelia

- ◆ Specialist in Pathological Anatomy at the Dr. Peset University Hospital in Valencia
- ◆ Specialist in Pathological Anatomy at the Vinalopó and Torrevieja university hospitals
- ◆ Specialist in Pathological Anatomy at the University Hospital of Donostia-San Sebastián
- ◆ PhD in Tumor Pathology
- ◆ Degree in Pathological Anatomy from the University of Carabobo
- ◆ Specialty in Pathological Anatomy at La Fe University Hospital in Valencia
- ◆ Master's Degree in Pathological Anatomy for Pathologists



Dr. Barbella, Rosa

- ♦ Specialist in Pathological Anatomy at the General University Hospital of Albacete
- ♦ Expert in Breast Pathology
- ♦ Tutor of Resident Doctors at the Faculty of Medicine of the University of Castilla-La Mancha
- ♦ Doctor in Medicine from the University of Castilla-La Mancha

Dr. Soto García, Sara

- ♦ Specialist in Pathological Anatomy at the Torrevieja University Hospital
- ♦ Specialist at the University Hospital of Vinalopó
- ♦ Member of: Spanish Society of Pathological Anatomy

Dr. Labiano Miravalles, Tania

- ♦ Pathologist at the Navarra Hospital Complex
- ♦ Degree in Medicine from the University of Navarra
- ♦ Cytology Expert

Dr. Ribalta Farrés, Teresa

- ♦ Pathologist and Neuropathologist at Hospital Clínic de Barcelona and IDIBAPS
- ♦ Neuropathology Specialist
- ♦ Head of the Department of Pathology and Director of the Biobank at Hospital Sant Joan de Déu
- ♦ Head of the Pediatric Pathology Section, Hospital Clínic de Barcelona
- ♦ Professor of Anatomic Pathology at the University of Barcelona
- ♦ Degree in Medicine from the University of Barcelona

Dr. Ortiz Reina, Sebastián

- ♦ Specialist in Anatomic Pathology at the Clinical Analysis and Anatomic Pathology Laboratory of Cartagena
- ♦ Associate Professor of Health Sciences in the subject: Pathological Anatomy at the Complutense University of Madrid
- ♦ University Professor in the subject: Histology and Cell Biology at the University School of Nursing of the University of Murcia
- ♦ University Professor of Internships for students in the Medical School of the Catholic University of Murcia
- ♦ Anatomic Pathology Residents' Tutor of the Cartagena University Hospital Complex
- ♦ University Specialist in Electron Microscopy by Madrid Complutense University
- ♦ University Specialist in Dermatopathology at Alcalá de Henares University

Dr. Villar, Karen

- ♦ Head of the High Resolution Consultation by Ultrasound-guided Puncture at the Henares University Hospital
- ♦ Coordinator of the Interventional Pathology Working Group of the SEAP
- ♦ Degree in Medicine from the Central University of Venezuela
- ♦ Specialty in Pathological Anatomy at the University Hospital of La Princesa in Madrid
- ♦ USFNA Ultrasound-Guided Fine-Needle Aspiration Certificate Recognition

06

Educational Plan

This study program distinguishes itself from others in the market by delving into the most innovative techniques and tools in the area of research and diagnosis of Oncologic Pathologies. Its syllabus, designed to update pathologists committed to medical practice, delves into the methodologies, genetic markers and tests that guarantee the early detection or exclusion of tumors in the human body. The program, consisting of 16 educational modules, is supported by innovative teaching methods such as Relearning and theoretical discussion of real cases to promote competencies in a fast and flexible way.





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100% online and interactive: in this way is the TECH learning platform where you will start your educational process of updating on the diagnosis of Oncological Pathologies”

Module 1. Cancer General Aspects. Risk Factors

- 1.1. Overview of Malignant Neoplasms
 - 1.1.1. Nomenclature
 - 1.2.2. Features
 - 1.3.3. How Metastases Spread
 - 1.4.4. Prognostic Factors
- 1.2. Epidemiology of Cancer
 - 1.2.1. Incidence
 - 1.2.2. Prevalence
 - 1.2.3. Geographical Distribution
 - 1.2.4. Risk Factors
 - 1.2.5. Prevention
 - 1.2.6. Early Diagnosis
- 1.3. Mutagenic Agents
 - 1.3.1. Environmental
 - 1.3.2. Work
 - 1.3.3. Toxic Substances in Food
- 1.4. Biological Agents and Cancer
 - 1.4.1. RNA Virus
 - 1.4.2. DNA Virus
 - 1.4.2.1. H. pylori
- 1.5. Genetic Predisposition
 - 1.5.1. Genes Linked to Cancer
 - 1.5.2. Susceptibility of Genes
 - 1.5.2.1. Breast Tumors
 - 1.5.2.2. Lung Tumors
 - 1.5.2.3. Thyroid Tumors
 - 1.5.2.4. Colon Tumors
 - 1.5.2.5. Skin Tumors
 - 1.5.2.6. Bone Tumors
 - 1.5.2.7. Pancreatic Tumors
 - 1.5.2.8. Neuroblastoma

- 1.6. Clinical Aspects of Malignant Neoplasms
 - 1.6.1. Introduction
- 1.7. Staging of neoplastic disease
 - 1.7.1. Update

Module 2. Molecular Basis of Cancer

- 2.1. Introduction to the Molecular Basis of Cancer
- 2.2. Genes and the Genome
 - 2.2.1. The Main Cell Signaling Pathways
 - 2.2.2. Cell Growth and Proliferation
 - 2.2.3. Cell Death. Necrosis and Apoptosis
- 2.3. Mutations
 - 2.3.1. Types of Mutations: Frameshift; InDels, Translocations; SNV; Missense; nonsense; CNV; Driver vs. Passenger
 - 2.3.2. Mutagens
 - 2.3.2.1. Biological Agents and Cancer
 - 2.3.3. Mutation Repair Mechanisms
 - 2.3.4. Mutations with Pathological and Non-Pathological Variants
- 2.4. Major Advances in Precision Medicine
 - 2.4.1. Tumor Biomarkers
 - 2.4.2. Oncogenes and Tumor Suppressor Genes
 - 2.4.3. Diagnostic Biomarkers
 - 2.4.3.1. Resistance
 - 2.4.3.2. Prognosis
 - 2.4.3.3. Pharmacogenomics
 - 2.4.4. Cancer Epigenetics
- 2.5. Main Techniques in the Molecular Biology of Cancer
 - 2.5.1. Cytogenetics and FISH (Fluorescence In Situ Hybridization)
 - 2.5.2. DNA Extract Quality
 - 2.5.3. Fluid Biopsy
 - 2.5.4. PCR as a Basic Molecular Tool
 - 2.5.5. Sequencing, NGS

Module 3. Childhood Malignant Tumors

- 3.1. The New World of Pediatric and Adolescent Neuropathology and How It Differs from Adult Neuropathology
 - 3.1.1. The New World of Pediatric and Adolescent Neuropathology
 - 3.1.2. How It Differs from Adult Neuropathology
- 3.2. Histomolecular Diagnosis of Medulloblastoma
 - 3.2.1. Introduction
 - 3.2.2. Basic Principles
- 3.3. Diagnosis of CNS Embryonal Tumors (former PNETs) Beyond the WHO 2016 Classification
 - 3.3.1. Update
- 3.4. Emerging Entities in the Molecular Classification of Central Nervous System (CNS) Tumors
 - 3.4.1. Update
- 3.5. Update on CNS Tumor Biomarkers (Adults and Children)
 - 3.5.1. Introduction
- 3.6. CNS Pseudotumors
 - 3.6.1. Update
- 3.7. Neuropathology of Degenerative Diseases
 - 3.7.1. A Normal Brain
 - 3.7.2. Neurodegeneration Mechanism
 - 3.7.3. Proteinopathies
 - 3.7.4. Alzheimers Disease
 - 3.7.5. Parkinson's Disease
 - 3.7.6. Amyotrophic Lateral Sclerosis
 - 3.7.7. Frontotemporal Lobe Degeneration
 - 3.7.8. Progressive Supranuclear Palsy
 - 3.7.9. Corticobasal Degeneration
 - 3.7.10. Prionopathies

Module 4. Nervous System Tumours

- 4.1. Central Nervous System Tumors
 - 4.1.1. Morphological and Molecular Classification
 - 4.1.2. Current Diagnostic Approach According to WHO and the IMPACT-NOW Consortium
- 4.2. Diffuse and Circumscribed Gliomas; Astrocytomas, Oligodendrogliomas, and Ependymomas
 - 4.2.1. Morphological and Molecular Classification
- 4.3. Neuronal and Neuroglial Tumors
 - 4.3.1. Histomorphological and Molecular Classification
 - 4.3.2. Diagnostic Approach According to Molecular and Genetic Alterations
- 4.4. Most Relevant Meningeal Tumors and Mesenchymal Tumors
 - 4.4.1. WHO Classification. New Morphological and Molecular Details
 - 4.4.2. Contributions of Molecular Pathology to the Management of these Lesions
- 4.5. Tumors of the Sellar and Suprasellar Region
 - 4.5.1. Advances in the Most Recent Classification of Sellar and Suprasellar Tumors
 - 4.5.2. Contribution of Radiology to the Diagnosis and Management of Sellar and Suprasellar Lesions
 - 4.5.3. Main Genetic Alterations in Sellar and Suprasellar Tumors
- 4.6. Peripheral Nerve Neoplasms
 - 4.6.1. Relevant Aspects of Morphology and Molecular Pathology in Peripheral Nerve Tumor Lesions

Module 5. Thoracic Cavity Organ Tumors

- 5.1. Neoplastic Lung Pathology
 - 5.1.1. WHO Classification and its Recent Updates on Lung Tumors
 - 5.1.2. Pulmonary Adenocarcinoma
 - 5.1.3. Squamous Cell Carcinoma of the Lung
 - 5.1.4. Microcytic Carcinoma of the Lung
 - 5.1.5. Other Primary Carcinomas of the Lung
- 5.2. Non-Neoplastic Pathology
 - 5.2.1. Interstitial Pneumonia

- 5.3. Lung Transplant Pathology
 - 5.3.1. Acute, Chronic, and Hyperacute Rejection
 - 5.3.2. Injuries due to Anti-Rejection Therapy
 - 5.3.3. Pathological and Anatomical Complications of Cardiac Transplantation
- 5.4. Pleural Pathology
 - 5.4.1. Classification of Benign and Malignant Pleural Lesions
 - 5.4.2. Immunohistochemical Diagnosis of Mesothelioma and its Differences with Reactive Pleural Lesions
- 5.5. Mediastinal Pathology
 - 5.5.1. Classification of Mediastinal Tumors: Advances and Limitations
 - 5.5.2. Pathologic and Molecular diagnosis of Mediastinal Tumor Lesions
- 5.6. Heart Disease
 - 5.6.1. Cardiac Transplantation

Module 6. Female Breast Tumors

- 6.1. Breast Cancer Epidemiology
 - 6.1.1. Worldwide Distribution
 - 6.1.2. Incidence and Prevalence
 - 6.1.3. Risk Factors
 - 6.1.4. Early Diagnosis
- 6.2. Cancer Diagnostic Circuit
 - 6.2.1. Multidisciplinary Work
 - 6.2.2. Radiology and Pathological Anatomy of the Breast
 - 6.2.3. Diagnosis by Core Needle Biopsy and Vacuum Aspiration
- 6.3. General Information on the Breast
 - 6.3.1. Hormone Receptor Expression
- 6.4. Clinical Aspects of Precursor Lesions of Breast Cancer
 - 6.4.1. B3 Lesions
 - 6.4.2. Diagnosis: Immunohistochemical Panel
 - 6.4.3. Treatment
 - 6.4.3.1. Excision
 - 6.4.3.2. Bless
 - 6.4.3.3. Active Surveillance
 - 6.4.3.4. Hormone Therapy





- 6.5. Invasive Ductal and Lobular Carcinoma
 - 6.5.1. Clinical Radiological Aspects
 - 6.5.2. Biological Behavior
 - 6.5.3. Hereditary Cancer Staging (TNM)
 - 6.5.4. Prognostic Group
 - 6.5.5. Biological Profile of Breast Cancer
 - 6.5.5.1. Hormone Receptors, ki67 and HER2 (Immunohistochemical Diagnosis-HIS)
 - 6.5.6. Role of p53 and -2 in Breast Cancer
 - 6.5.7. New Therapeutic Targets
 - 6.5.7.1. PD1/PDL-1
- 6.6. Anatomical and Pathological Assessment of the Breast after Neoadjuvant Treatment
 - 6.6.1. Sentinel lymph node
 - 6.6.1.1. Pre- and Post-Neoadjuvant Diagnosis
 - 6.6.1.1.1. OSNA Method
 - 6.6.1.1.2. Frozen Section
- 6.7. Axillary Management
 - 6.7.1. Axillary Conservation vs. Lymphadenectomy

Module 7. Genitourinary Tract Tumors

- 7.1. Ovario (Dr. María Serrano)
 - 7.1.1. Epidemiology
 - 7.1.1.1. Hereditary Ovarian Cancer
 - 7.1.2. Classification
 - 7.1.2.1. Updating and Concepts
 - 7.1.2.2. Epithelial Ovarian Tumors
 - 7.1.2.3. Pathogenesis
 - 7.1.2.4. Histological Subtypes
 - 7.1.2.5. Immunohistochemistry
 - 7.1.2.6. Molecular Characteristics
 - 7.1.3. Ovarian Stromal Tumors
 - 7.1.3.1. Histological Subtypes
 - 7.1.3.2. Immunohistochemistry
 - 7.1.3.3. Molecular Characteristics

- 7.1.4. Ovarian Germ Cell Tumors
 - 7.1.4.1. Histological Subtypes
 - 7.1.4.2. Immunohistochemistry
 - 7.1.4.3. Molecular Characteristics
- 7.1.5. Immunotherapy
 - 7.1.5.1. The Role of the Pathologist in Therapeutic Targets for Ovarian Cancer
- 7.2. Vulva (Dr. Sara Soto)
 - 7.2.1. Precursor Lesions of Vulvar Carcinoma
 - 7.2.1.1. New Terminology
 - 7.2.2. Types of Vulvar Epithelial Carcinomas
 - 7.2.2.1. Update
 - 7.2.3. TNM/FIGO Classification
 - 7.2.3.1. Update
 - 7.2.4. Other Malignant Neoplasms
- 7.3. Uterus (Dr. Sara Soto)
 - 7.3.1. OMS Classification
 - 7.3.1.1. Update
 - 7.3.2. Types of Uterine Epithelial Carcinomas
 - 7.3.2.1. Immunohistochemistry
 - 7.3.2.2. Molecular Aspects
 - 7.3.3. Uterine Sarcomas
 - 7.3.3.1. Update
 - 7.3.4. Other Malignant Uterine Neoplasms
 - 7.3.4.1. Update
 - 7.3.5. TNM/FIGO Classification
 - 7.3.5.1. Update
- 7.4. Prostatic and Seminal Vesicle Pathology. Dr. Josefa Herrero)
 - 7.4.1. Prostate Histopathology
 - 7.4.1.1. Non-Tumorous Lesions
 - 7.4.1.2. "Premalignant" Lesions
 - 7.4.1.3. Malignant Prostate Lesions
 - 7.4.2. Seminal Vesicle Neoplasia
 - 7.4.3. General Aspects of Histological Processing, Histochemistry, and Immunohistochemistry
 - 7.4.4. Basis of Prostate Molecular Pathology, Precision Medicine, and Quality

Module 8. Skin Tumors

- 8.1. Epidermal Tumors
 - 8.1.1. Keratotic and Hyperplastic Lesions
 - 8.1.1.1. Epidermal Nevi
 - 8.1.1.2. Viral Infections
 - 8.1.1.3. Acanthomas
- 8.2. Benign Neoplasms
 - 8.2.1. Seborrheic Keratosis
 - 8.2.2. Lichenoid Keratosis
- 8.3. Malignant Neoplasms
 - 8.3.1. Actinic Keratosis
 - 8.3.2. Bowen's Disease
 - 8.3.3. Basal Cell Carcinomas
 - 8.3.4. Squamous cell carcinoma
- 8.4. Adnexal Tumors
 - 8.4.1. Tumors with Sebaceous Differentiation
 - 8.4.2. Tumors with Follicular Differentiation
 - 8.4.3. Tumors with Glandular Differentiation
- 8.5. Cutaneous Lymphoid Infiltrates
 - 8.5.1. Lymphoid Hyperplasia
 - 8.5.2. T-Cell Lymphomas
 - 8.5.3. Mycosis Fungoides
 - 8.5.4. CD 30 + Lymphoproliferative Processes
 - 8.5.5. Primary Cutaneous T Lymphomas
 - 8.5.6. Lymphomas
 - 8.5.7. Marginal Zone B lymphomas
 - 8.5.8. Follicular Center B Lymphomas
 - 8.5.9. Diffuse Large B-cell Lymphoma
- 8.6. Melanocytic Tumors
 - 8.6.1. Lentigo
 - 8.6.2. Dermal Melanosis and Melanocytosis
 - 8.6.3. Melanocytic Nevi
 - 8.6.4. Melanoma

- 8.7. Mesenchymal Tumors
 - 8.7.1. Vascular Tumours
 - 8.7.2. Adipose Tissue Tumors
 - 8.7.3. Tumors and Fibrous Proliferations
 - 8.7.4. Muscular and Osteocartilaginous Tumors
- 8.8. Neural and Neuroendocrine Tumors
 - 8.8.1. Peripheral Nerve Tumors
 - 8.8.2. Neuroendocrine Tumors
 - 8.8.2.1. Neuroectodermal Tumor
 - 8.8.2.2. Merkel Cells Carcinoma

Module 9. Gastrointestinal Tract Tumors

- 9.1. Molecular Diagnosis and Classification of Stomach Cancer
 - 9.1.1. Molecular Diagnosis and Classification of Stomach Cancer
 - 9.1.2. Classification
- 9.2. Molecular Classification of Colorectal Carcinoma
 - 9.2.1. Hereditary Colorectal Carcinoma
 - 9.2.2. Serrated Polyposis Syndrome
 - 9.2.3. Molecular Staging of Colorectal Carcinoma
- 9.3. GIST (GastroIntestinal Stromal Tumours)
 - 9.3.1. Genetics
 - 9.3.2. Therapeutic Implications
- 9.4. Biliopancreatic and Ampullary Precursor Lesions
 - 9.4.1. Biliopancreatic Precursor Lesions
 - 9.4.2. Ampullary Lesions
- 9.5. Esophageal Lesions
 - 9.5.1. Biliopancreatic Precursor Lesions
 - 9.5.2. Role of Infectious Agents in Esophageal Cancer
 - 9.5.3. Rare Esophageal Tumors

Module 10. Hemolymphoid Tumors

- 10.1. Diagnostic Tools in Lymphomas
 - 10.1.1. General Aspects
 - 10.1.2. Indispensable Tools in the Diagnosis and Management of Lymphoid Pathology
- 10.2. The Main Mature B-Cell Neoplasms (1)
 - 10.2.1. General Aspects
- 10.3. The Main Mature B-Cell Neoplasms (2)
 - 10.3.1. General Aspects
- 10.4. Mature T and NK Cell Neoplasms
 - 10.4.1. General Aspects
- 10.5. Diagnostic Difficulties in Hodgkin's Lymphoma
 - 10.5.1. Description of Hodgkins Lymphoma
 - 10.5.2. Diagnostic Difficulties

Module 11. Cytological Diagnosis of Malignant Lesions

- 11.1. Introduction to Cytopathology (ART and SCIENCE)
 - 11.1.1. Historical Perspective
 - 11.1.2. Practical Concepts
 - 11.1.2.1. Management
 - 11.1.2.2. Staining
 - 11.1.3. Basic Concepts Cytomorphology
- 11.2. Exfoliative Cytology
 - 11.2.1. Gynecologic Cytology - Bethesda System
 - 11.2.2. Urine Cytology - Paris System
 - 11.2.3. Bodily Fluids Cytology
- 11.3. Superficial Fine Needle Aspiration Puncture
 - 11.3.1. Introduction
 - 11.3.1.1. Practical Aspects
 - 11.3.2. Thyroid and Salivary Gland FNA
 - 11.3.3. Breast FNA
 - 11.3.4. Soft Tissue and Bone FNA

- 11.4. DEEP Fine Needle Aspiration Puncture
 - 11.4.1. Introduction - ROSE (Rapid On-Site Evaluation)
 - 11.4.1.1. Lung and Mediastinal FNA
 - 11.4.1.2. Pancreas FNA
 - 11.4.1.3. Lymph Node FNA
- 11.5. Differential Diagnosis in Cytopathology
 - 11.5.1. Main Cytomorphological Patterns
 - 11.5.2. Immunocytochemistry
 - 11.5.3. Molecular Cytopathology
- 11.6. The Role of Cytopathologists in the Treatment of Cancer
 - 11.6.1. Study of Biomarkers in Cytological Samples
 - 11.6.2. Immunotherapy and the Role of Cytopathology
 - 11.6.3. Challenges and New Perspectives

Module 12. Radiology as an Ally of Pathology in Oncologic Diagnosis

- 12.1. Diagnostic Imaging and Cancer Staging
 - 12.1.1. Lung Neoplasia
 - 12.1.2. Colorectal Neoplasia
 - 12.1.3. Breast Neoplasia
 - 12.1.4. Prostate Neoplasia
 - 12.1.5. Gynecologic Neoplasia
 - 12.1.6. Lymphoma
 - 12.1.7. Melanoma
 - 12.1.8. Other GI Tract Tumors
 - 12.1.9. Hepatocarcinoma and Cholangiocarcinoma
 - 12.1.10. Pancreatic Tumors
 - 12.1.11. Renal Tumors
 - 12.1.12. Thyroid Cancer
 - 12.1.13. Brain Tumors
- 12.2. ImageGuided FNA and CNB
 - 12.2.1. Thyroid
 - 12.2.2. Breast
 - 12.2.3. Lung and Mediastinum
 - 12.2.4. Liver and Abdominal Cavity
 - 12.2.5. Prostate





- 12.3. Monitoring
- 12.4. RECIST 1.1 and Chung
 - 12.4.1. EASL, m-RECIST and RECICL
 - 12.4.2. MacDonald and RANO Criteria
 - 12.4.3. CHOI, MDA, and Lugano Criteria
 - 12.4.4. Modified CHOI Criteria; SCAT and MASS
 - 12.4.5. MET-RAD- S
 - 12.4.6. PERCIST
 - 12.4.7. Immunotherapy
- 12.5. Treatment Complications
 - 12.5.1. Oncologic Emergencies
 - 12.5.2. Treatment Complications

Module 13. Head and Neck Tumors

- 13.1. Fine Needle Aspiration of Head and Neck Lesions
 - 13.1.1. Basic Principles
- 13.2. Anatomopathological Diagnosis in Small Biopsies of the Upper Aerodigestive Tract
 - 13.2.1. Basic Principles
- 13.3. Selected Head and Neck Tumors
 - 13.3.1. Parathyroid Pathology
 - 13.3.2. Thyroid Pathology
 - 13.3.3. Pituitary Gland Pathology
- 13.4. Salivary Gland Neoplasms
 - 13.4.1. Basic Principles
- 13.5. Destructive Diseases of the Midfacial Region
 - 13.5.1. Typology
- 13.6. Sinonasal Pathology
 - 13.6.1. Basic Principles
- 13.7. Selected Topics in Ear Pathology
 - 13.7.1. Definition
- 13.8. Intraoperative Biopsy in Head and Neck Tumors
 - 13.8.1. Intraoperative Biopsy in Head Tumors
 - 13.8.2. Intraoperative Biopsy in Neck Tumors

- 13.9. Head and Neck Pathology
 - 13.9.1. Mouth
 - 13.9.2. Salivary Glands
 - 13.9.3. Epidemiology of Oral and Laryngeal Cancer
 - 13.9.4. Worldwide Distribution
 - 13.9.5. Incidence and Prevalence
 - 13.9.6. Risk Factors
 - 13.9.7. Early Diagnosis
 - 13.9.8. Premalignant Lesions
 - 13.9.8.1. Leukoplakia
 - 13.9.8.2. Erythroplakia
 - 13.9.8.3. Actinic Cheilitis
 - 13.9.8.4. Lichen Planus
 - 13.9.9. Clinical Characteristics
 - 13.9.10. Staging
 - 13.9.11. Dysplasia Grading System for Head and Neck Lesions
 - 13.9.12. HPV and Epstein-Barr Virus in Oral Cancer
 - 13.9.13. Update on Head and Neck Tumors
 - 13.9.13.1. 4th Edition of the WHO Blue Book
 - 13.9.14. Epidemiology of Malignant Salivary Gland Lesions
 - 13.9.14.1. Clinical Symptoms
 - 13.9.14.2. Diagnostic Imaging
 - 13.9.14.3. Anatomopathologic Diagnosis
 - 13.9.14.4. Adenoid Cystic Carcinoma ex Pleomorphic Adenoma
 - 13.9.14.5. Mucoepidermoid Carcinoma and Low-Grade Polymorphous Adenocarcinoma
 - 13.9.14.6. Molecular Alterations Involved in the Development of Salivary Gland Tumors
 - 13.9.14.7. Biomarkers and immunohistochemical panel

Module 14. Soft Tissue Tumors

- 14.1. Molecular Alterations in Sarcomas
 - 14.1.1. Grading Systems in Cylindrical Biopsy and Surgical Specimen
 - 14.1.2. Contributions of Radiological Imaging and PET Techniques in Sarcoma Diagnosis
 - 14.1.3. What to Report to Oncologists in a Cylindrical Biopsy in Case of a Suspected Sarcoma
- 14.2. Adipocytic, Fibroblastic, and Myofibroblastic Tumors
 - 14.2.1. Adipocytic Tumors
 - 14.2.2. Fibroblastic Tumors
 - 14.2.3. Myofibroblastic Tumors
- 14.3. Fibrohistiocytic Tumor, Smooth Muscle Lesions, Skeletal Muscle, and Vascular Lesions
 - 14.3.1. Fibrohistiocytic Tumors
 - 14.3.2. Smooth Muscle Lesions
 - 14.3.3. Skeletal Muscle
- 14.4. Nerve Sheath Neoplasms, GIST, and Tumors of Uncertain Differentiation
 - 14.4.1. Myxoma
 - 14.4.2. Angiomyxoma
 - 14.4.3. Pleomorphic Angiectatic Tumor
 - 14.4.4. Synovial Sarcoma
 - 14.4.5. Epithelioid Sarcoma
 - 14.4.6. Clear Cell Sarcoma
- 14.5. Undifferentiated or Unclassifiable Sarcomas, Ewing/PNET Sarcomas, Ewing-like Sarcomas
 - 14.5.1. Undifferentiated or Unclassifiable Sarcomas
 - 14.5.2. Ewing/PNET Sarcomas
 - 14.5.3. Ewing-Like Sarcomas
- 14.6. Advances in Immunohistochemistry and Molecular Biology in the Diagnosis of Soft Tissue Sarcomas
 - 14.6.1. Advances in Immunohistochemistry
 - 14.6.2. Molecular Biology in the Diagnosis of Soft Tissue Sarcomas

- 14.7. Problem Cases of Myxoid, Spindle Cell, Pleomorphic Epithelioid, Rhabdoid, and Round Cell Sarcomas in Pediatric and Adult Patients, Superficial vs. Deep Location
 - 14.7.1. Typology
 - 14.7.2. Differences between Pediatric and Adult Patients
 - 14.7.3. Differences according to Location
- 14.8. Intra-Abdominal Sarcomas
 - 14.8.1. Basic Principles
- 14.9. Diagnostic Algorithms for Each Group of Sarcomas
 - 14.9.1. Typology

Module 15. Big Data in Anatomy Pathology

- 15.1. Introduction to Big Data in Pathology
 - 15.1.1. Introduction
 - 15.1.1.1. Pathology and Databases
 - 15.1.1.2. Data Mining in Pathology
 - 15.1.1.3. Big Data
 - 15.1.1.3.1. The Fundamentals of Big Data
 - 15.1.1.3.2. Types of BBDD
 - 15.1.1.3.2.1. Relational
 - 15.1.1.3.2.2. Non-Relational (SQL and NoSQL)
 - 15.1.1.3.3. Types of Data
 - 15.1.1.3.3.1. Structured
 - 15.1.1.3.3.2. Unstructured
 - 15.1.1.3.3.3. Semi-Structured
 - 15.1.1.3.4. The Limits of Big Data
- 15.2. Great Opportunities and Uses of Big Data
 - 15.2.1. Data Standardization and Digital Pathology
 - 15.2.2. Personalized Medicine: Personalized Diagnostics and Therapies
 - 15.2.3. Predictive Markers
 - 15.2.4. Advances in Research Fields Such As: Genomics, Molecular Pathology Diagnostics, Proteomics, and Diagnostic Comparison

- 15.3. Algorithms, Models and Methodologies used in Big Data
 - 15.3.1. Architectures for Massively Parallel Processing
 - 15.3.2. Modeling and Decision Trees
 - 15.3.3. Machine Learning and Deep Learning
 - 15.3.4. Neural Networks
- 15.4. Big Data and Cloud Computing Technologies
 - 15.4.1. Apache Hadoop
 - 15.4.2. Working with NoSQL Databases
 - 15.4.2.1. DynamoDB or Cassandra
 - 15.4.3. Data Analysis
 - 15.4.3.1. BigQuery
 - 15.4.3.2. Infosphere Streams
 - 15.4.3.3. Oracle Big Data Appliance
- 15.5. Conclusions and Benefits of Big Data from a Pathology Point of View
 - 15.5.1. Big Data Findings from a Pathology Point of View
 - 15.5.2. Benefits

Module 16. Toxicology for Surgical Pathologists: Review of Some Relevant Issues in Daily Practice

- 16.1. General Concepts of Toxicology
 - 16.1.1. Definition
- 16.2. When to Suspect Organ Damage due to Toxic Effects?
 - 16.2.1. Introduction
 - 16.2.2. Symptoms
- 16.3. Models of Histologic Toxicity of Adverse Reactions to Drugs and Medications with Emphasis on Those Used in Oncology
 - 16.3.1. Models of Histologic Toxicity of Adverse Drug Reactions
 - 16.3.2. Medications with Emphasis on those Used in Oncology
- 16.4. Reversal of a Clinical Autopsy to Medical Forensic in Which There Is Suspicion of a Crime
 - 16.4.1. Introduction
 - 16.4.2. Autopsy with Suspicion of a Crime

07

Clinical Internship

At the end of the theoretical and 100% online phase of this program, TECH has contemplated a period of practical training in a prestigious medical center. From this in-person stay, the pathologist will be able to directly apply all the competencies acquired in the first academic stage.





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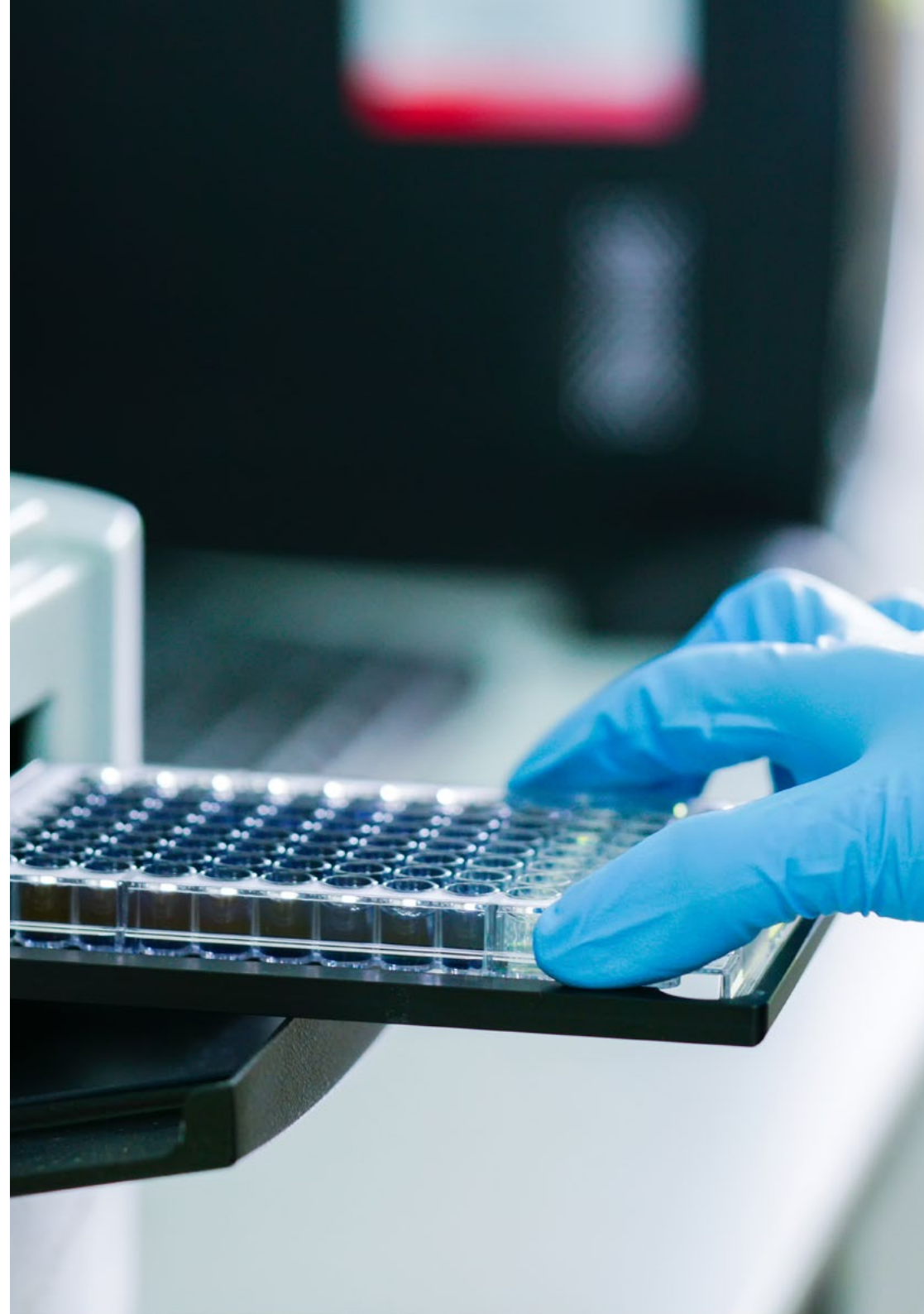
Apply innovative procedures for the diagnosis of Breast Cancer in first-level hospital centers and provide zealous care to real patients”

During the above mentioned program, the pathologist will be hosted in a highly prestigious hospital center. In this institution, the student must complete work days, from Monday to Friday, in consecutive 8-hour shifts, until completing 3 weeks of apprenticeship. Throughout this period, you will put into practice everything you have learned in the theoretical phase and you will deal directly with real patients who require early diagnosis to confirm or rule out Oncologic Pathologies.

This educational process will be marked by the intervention and collaboration of experts with extensive experience in this medical area. In this way, thanks to its individualized guidance, the healthcare professional will become more skilled in the development of cutting-edge procedures to address tumors and lesions of varying complexity. On the other hand, they will be supported by an assistant tutor who will monitor their progress and verify the correct acquisition of advanced competencies.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the the medical practice (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the internship, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:



Module	Practical Activity
The most innovative pathological tests on the market to detect Oncologic Pathologies	Perform fluorescence on-site hybridization (FOSH) to determine the position of specific genes
	Implement Polymerase Chain Reaction (PCR) to DNA samples with suspected tumorigenicity
	Perform Western blot hybridization to analyze proteins or peptides related to cancer
	Implementation of molecular biology techniques (FISH, PCR, RT-PCR) for different pathological samples
	Use Electron Microscopy to obtain more comprehensive genetic information of the oncology patient
	Apply those radiological techniques that are used in the functional study and diagnosis of malignant tumors
Toxicology for surgical pathologists in daily practice	Detect the main anatomopathological signs of death by intoxication
	Diagnose the macroscopic and histological alterations caused by toxic substances in the body of the patients
	Determine the most appropriate diagnostic technique, according to the patient's physical condition, to check the toxicological status of the organism
Female Breast Tumors	To evaluate the breast pre- and post-neoadjuvant breast with different diagnostic techniques for diagnostic techniques of oncologic pathology
	Indicate genetic testing to determine variations in the BRCA and TP53 genes significant in breast cancer
	Apply HER2 and other cytology tests to determine the presence of cancer cells in the breast
	Breast cancer typing by hematoxylin-eosin staining and other immunohistochemistry techniques
	Determine if the patient has oncological criteria to be treated with Trastuzumab after a Breast Biopsy has been performed

Module	Practical Activity
Skin Tumors and Hemolymphoid Tumors	Indicate skin biopsies in lesions whose morphological characteristics have changed considerably over time
	Apply different sampling, according to the analytical technique to be applied, for laboratory and molecular pathology units
	Diagnose different types of systemic lymphomas and mature B and T stiper neoplasms
	Perform histopathological diagnosis of Hodgkin's lymphomas
	Recognize the morphological and molecular differences between benign and malignant lesions of the hematolymphoid system
Tumors of the Nervous System, head, neck, and particularities in the diagnosis of tumors in children and particularities in the diagnosis of tumors in children	Evaluate selear and supraselear lesions of the central nervous system using morphological, molecular, and radiological diagnostic techniques
	Perform staging of pre-school astrocytomas for brain tumors
	Indicate routine, special stains, and biomarkers in Medulloblastoma to detect malignant tumors in childhood
	Identify the diagnostic difficulties of precursor lesions of Oral Cancer, as well as tumor pathology of the Oral Mucosa and Salivary Glands, based on the histological and molecular characteristics of these diseases



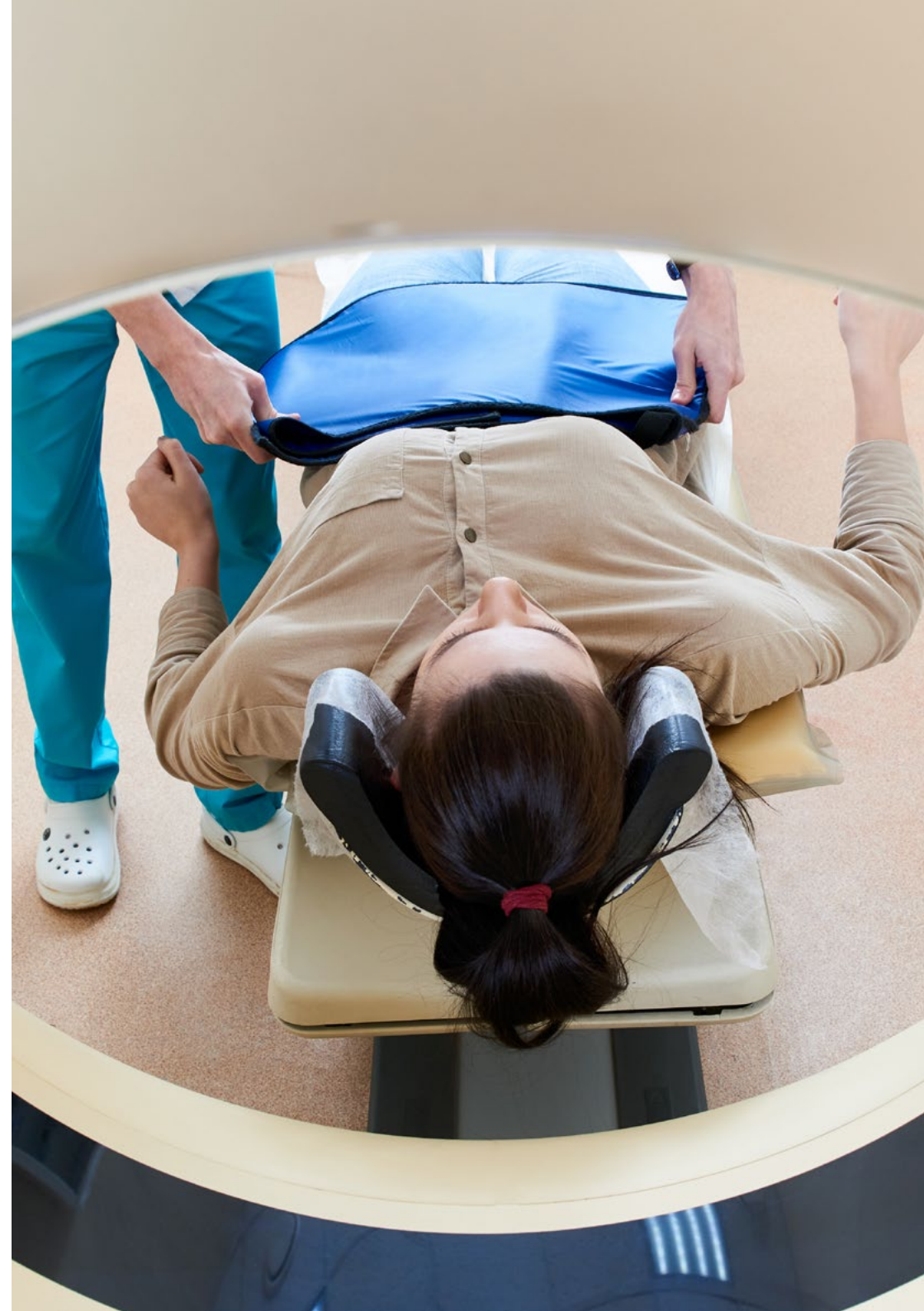
Enroll in TECH and take a new step towards your professional excellence with the most up-to-date knowledge on Immunohistochemistry tests"

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.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training 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 for Practical Training

The general terms and conditions of the internship program agreement shall be as follows:

1. TUTOR: During the Hybrid 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 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 Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid 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 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 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 Hybrid Master in Update in Oncologic Pathology for Pathologists is a unique educational opportunity of its kind thanks to the practical and in-person stay that its graduates will develop. From its wide network of contacts and partners, TECH has carefully selected the health facilities where the professionals will be hosted for 3 intensive weeks. Many of them are located in distant geographical locations, giving health professionals the opportunity to choose the center of their choice and prepare themselves academically according to international standards.





“

Complete the practical phase of this program will be an ideal complement for you to develop more comprehensive skills based on the theoretical content already received”



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



Medicine

Hospital HM Modelo

Country	City
Spain	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
- Palliative Care



Medicine

Hospital HM Rosaleda

Country	City
Spain	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



Medicine

Hospital HM Regla

Country	City
Spain	León

Address: Calle Cardenal Landázuri, 2, 24003, León

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

Related internship programs:

- Update on Psychiatric Treatment in Minor Patients



Medicine

Hospital HM Nou Delfos

Country	City
Spain	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



Medicine

Hospital HM Madrid

Country	City
Spain	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:

- Palliative Care
- Anaesthesiology and Resuscitation



Medicine

Hospital HM Montepíncipe

Country	City
Spain	Madrid

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

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

Related internship programs:

- Palliative Care
- Aesthetic Medicine



Medicine

Hospital HM Torrelodones

Country	City
Spain	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
- Palliative Care



Medicine

Hospital HM Sanchinarro

Country	City
Spain	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
- Palliative Care



Hospital HM Nuevo Belén

Country	City
Spain	Madrid

Address: Calle José Silva, 7, 28043, Madrid

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

Related internship programs:

- General and Digestive System Surgery
- Clinical Nutrition in Medicine



Hospital HM Puerta del Sur

Country	City
Spain	Madrid

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

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

Related internship programs:

- Palliative Care
- Clinical Ophthalmology



HM CIOCC - Centro Integral Oncológico Clara Campal

Country	City
Spain	Madrid

Address: Calle de Oña, 10, 28050, Madrid

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

Related internship programs:

- Gynecologic Oncology
- Clinical Ophthalmology



HM CIOCC Barcelona

Country	City
Spain	Barcelona

Address: Avenida de Vallcarca, 151, 08023, Barcelona

Network of private clinics, hospitals and specialized centers distributed

Throughout the Spanish geography

Related internship programs:

- Advances in Hematology and Hemotherapy
- Oncology Nursing



Medicine

HM CIOCC Galicia

Country: Spain
City: La Coruña

Address: Avenida das Burgas, 2, 15705, Santiago de Compostela

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

Related internship programs:

- Gynecologic Oncology
- Clinical Ophthalmology



Medicine

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



Medicine

Policlínico HM Distrito Telefónica

Country: Spain
City: Madrid

Address: Ronda de la Comunicación, 28050, Madrid

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

Related internship programs:

- Optical Technologies and Clinical Optometry
- General and Digestive System Surgery





Medicine

Policlínico HM Las Tablas

Country	City
Spain	Madrid

Address: C. de la Sierra de Atapuerca, 5, 28050, Madrid

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

Related internship programs:

- Nursing in the Traumatology Department
- Diagnosis in Physiotherapy



Medicine

Policlínico HM Moraleja

Country	City
Spain	Madrid

Address: P.º de Alcobendas, 10, 28109, Alcobendas, Madrid

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

Related internship programs:

- Rehabilitation Medicine in Acquired Brain Injury Management



Medicine

Policlínico HM Sanchinarro

Country	City
Spain	Madrid

Address: Av. de Manoteras, 10, 28050, Madrid

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

Related internship programs:

- Gynecological Care for Midwives
- Nursing in the Digestive System Department

09

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.



“

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.

“

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.



10 Certificate

This Hybrid Master's Degree in Update on Oncologic Pathology for Pathologists guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid 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 program will allow you to obtain your **Hybrid Master's Degree diploma in Update on Oncologic Pathology for Pathologists** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

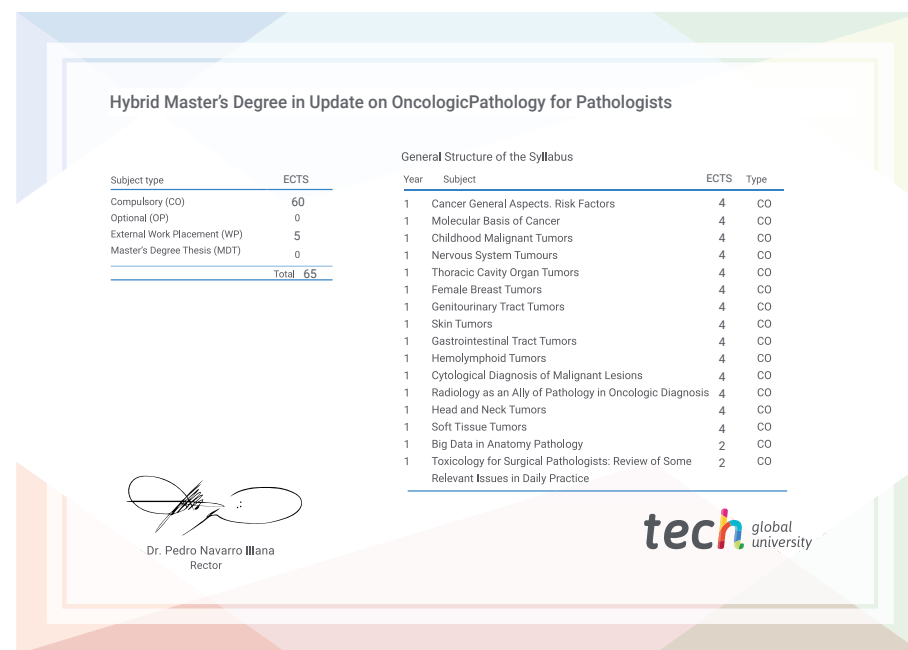
Title: **Hybrid Master's Degree in Update on Oncologic Pathology for Pathologists**

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

Duration: **12 months**

Certificate: **TECH Global University**

Recognition: **60 + 5 ECTS Credits**



*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.

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



Hybrid Master's Degree
Update on Oncologic
Pathology for Pathologists

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 créditos ECTS

Hybrid Master's Degree

Update on Oncologic
Pathology for Pathologists