Professional Master's Degree

Update on Oncologic Pathology for Pathologists

tech technological university

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Professional Master's Degree

Update on Oncologic Pathology for Pathologists

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/in/medicine/professional-master-degree/master-update-oncologic-pathology-pathologists

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01

Introduction

Cancer patients are highly complex medical patients who require the attention and coordination of different health professionals (nurses, psychologists, pathologists, surgeons, oncologists, among others). They must work together towards establishing the most appropriate approach and treatment of the neoplasm, as well as all the secondary pathologies that may appear as the disease progresses. For this reason, multidisciplinary care is now considered a parameter of quality, better patient experience, and a cornerstone of the model of excellent cancer care. This Professional Master's Degree will allow students to develop the skills and abilities required by the profession, generating greater added value to their professional performance.

This Professional Master's Degree in Update on Oncologic Pathology for Pathologists will provide you with confidence in the performance of your profession, which will help you to offer a high-quality service to your patients"

The growing understanding of cancer biology and the different pathways by which the immune system is suppressed during tumor progression has led to the development of various immunotherapeutic strategies that increase the ability to eliminate emerging malignancies. Among these new therapies, anti-PD1 and anti-PDL1 antibodies are showing increasingly unprecedented efficacy. It is, therefore, essential that professionals keep up to date in the different areas of biomedical sciences in order to achieve an optimal understanding and an accurate therapeutic approach.

By presenting the Update on Oncologic Pathology in Professional Master's Degree format, we ensure this requirement by addressing the most recent aspects with great impact on the etiopathogenesis, diagnosis, and prognosis of the most frequent malignant tumors, using an integrative methodology of learning in each of the modules, which excellently interrelates the new techniques and technologies involved in the diagnosis of neoplastic diseases, which not only helps professionals develop the skills required to make an accurate diagnosis, but also to prevent and try to modify, in any way, the outcome of the cancer patient.

This Professional Master's Degree in Update on Oncologic Pathology for Pathologists offers the possibility to specialize in cancer treatment, in order to become an excellent professional with expertise in the latest developments in the treatment of this type of disease.

The program is developed by a range of leading oncology professionals, who contribute to each module with their own professional experiences, the most noteworthy advances and the most effective treatments in each of the cancer specialties that are studied throughout this training program. A great opportunity to specialize in Oncologic Pathology for Pathologists from those who know the most about this subject.

This **Professional 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:

- More than 75 practical cases presented by experts in Anatomical Pathology
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Latest developments in Anatomical Pathology
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Anatomical Pathology
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work.
- Content that is accessible from any fixed or portable device with an Internet connection

Update your knowledge through the Professional Master's Degree in Update on Oncologic Pathology for Pathologists"

This Professional Master's Degree may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Oncologic Pathology for Pathologists, you will obtain a qualification from TECH Technological University"

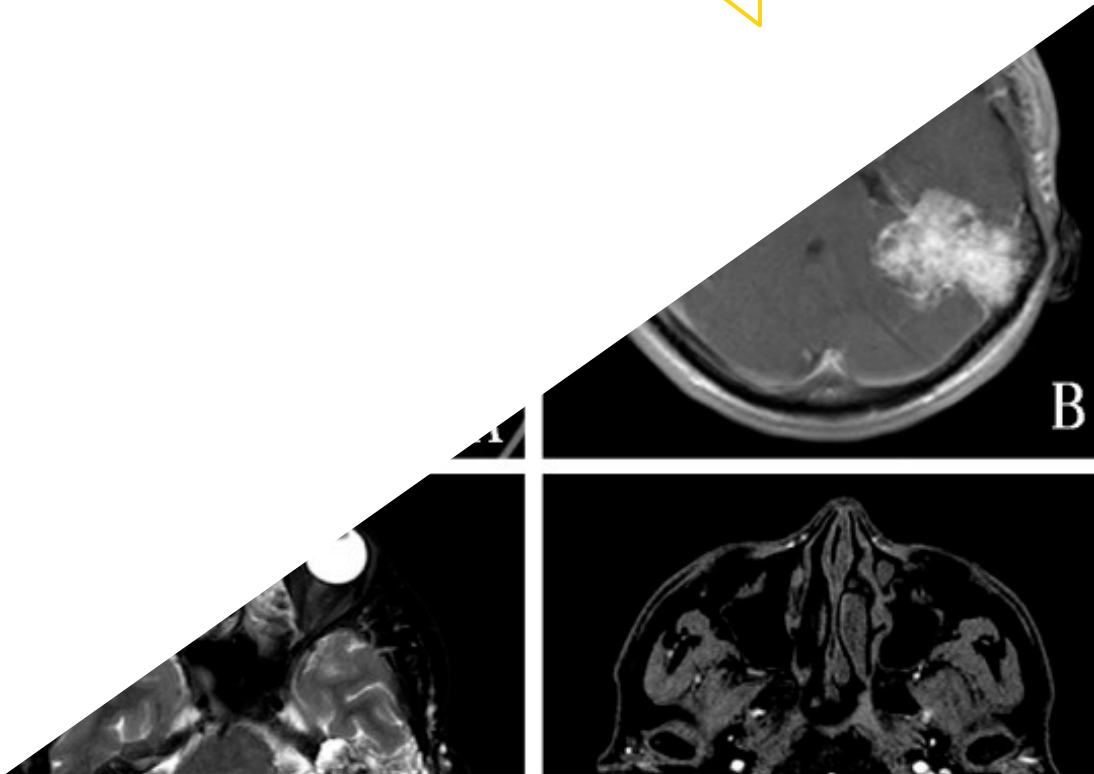
Enhance your professional performance and improve your patients' quality of life.

Take the opportunity to learn about the latest advances in Oncologic Pathology and be more effective in your daily practice.

The teaching staff includes anatomical pathology professionals, who bring their experience to this training program, as well as renowned specialists belonging to leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training program designed to train in real situations.

This program is designed around Problem Based Learning, whereby students must try to solve the different professional practice situations that arise during the course. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in the field of anatomical pathology with extensive medical experience.



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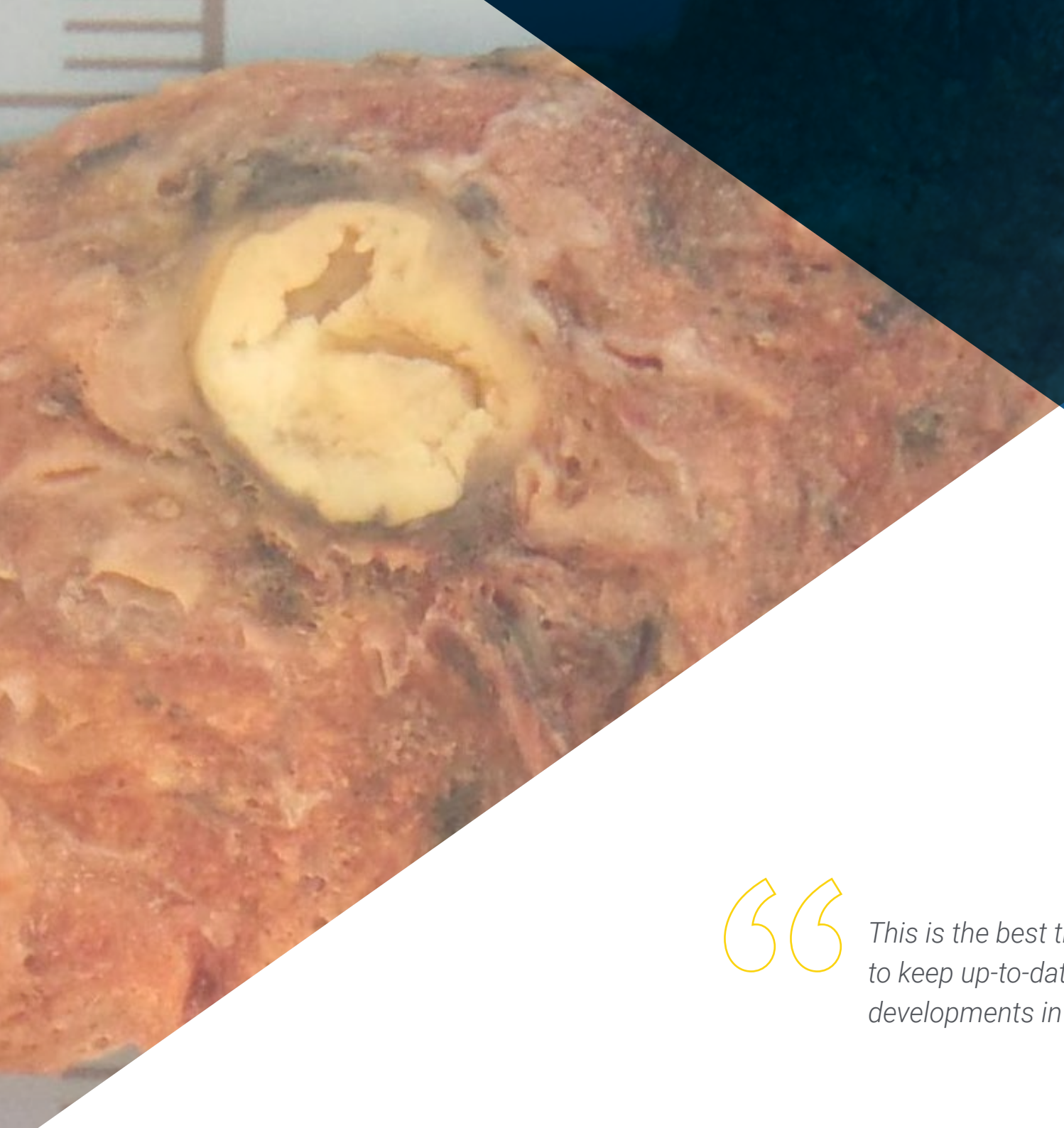
Objectives

The program in Update on Oncologic Pathology for Pathologists is aimed at facilitating professional medical performance with the latest advances and most innovative treatments in the sector.



This is the best training you can get to keep up-to-date with the latest developments in Oncologic Pathology"

General Objective

- The main objective of this Anatomical Pathology training course is to introduce the professional to the use and management of medical technology, in order to properly interpret data, which will facilitate their daily work with the use of the latest advances available in oncologic treatments

Take advantage of the opportunity and take the step to get up to date on the latest developments in anatomical pathology"

Specific Objectives

Module 1. Cancer General 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, which cause erratic 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 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 Tumors

- Acquire more in-depth knowledge of histological and molecular aspects of 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 CNS 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 the epidemiological and diagnostic aspects of breast cancer and its precursors in greater depth
- 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
- Review developments in the histopathologic classification of ovarian, vulvar, and uterine tumors
- Study 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
- Delve into 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 Hodgkin's 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
- Indications, limitations, and complications
- Know the cytologic patterns of malignancy, their differential diagnosis
- 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 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

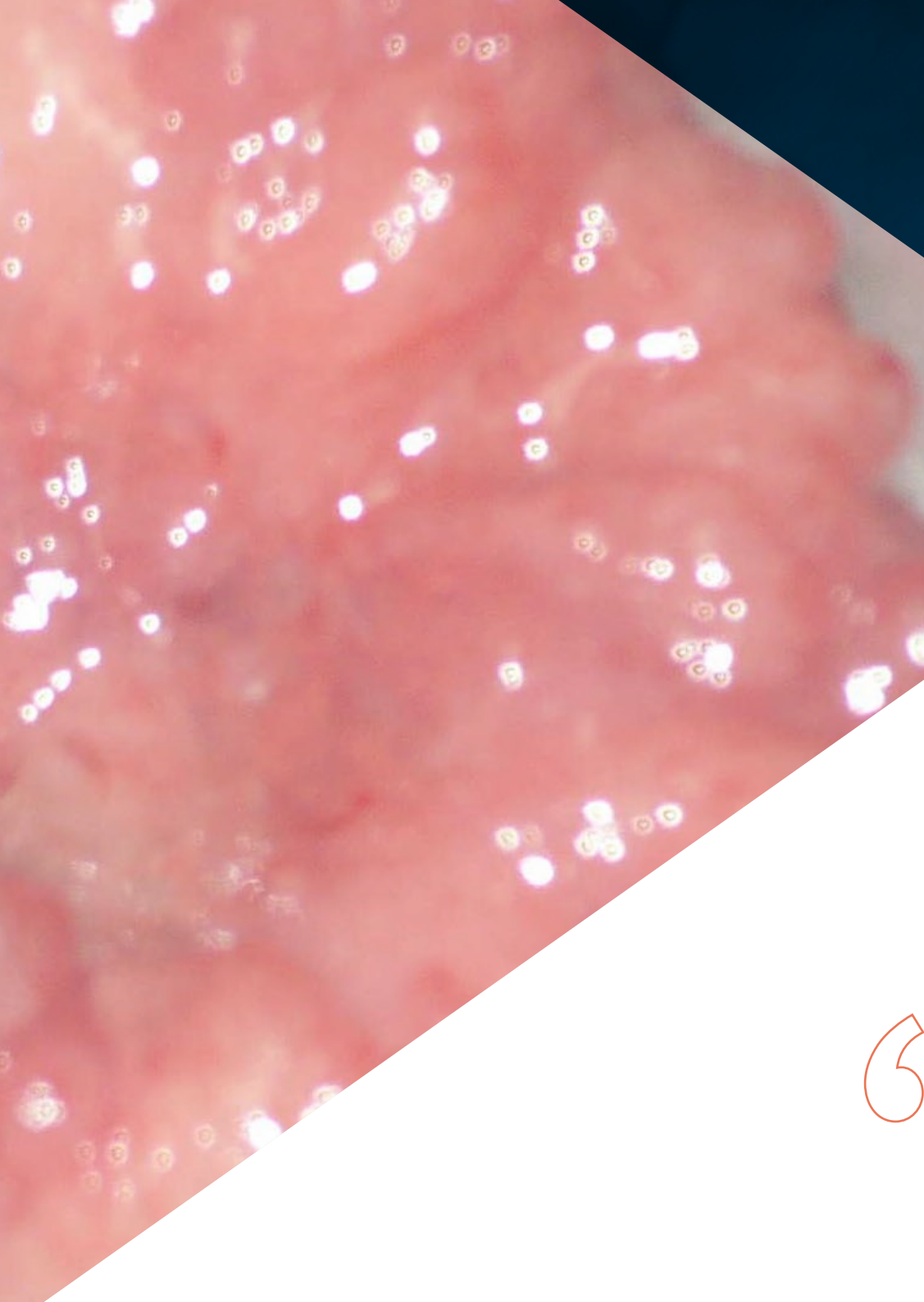
Module 16. Toxicology for Surgical Pathologists Review of Some Relevant Issues in Daily Practice

- 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

03

Skills

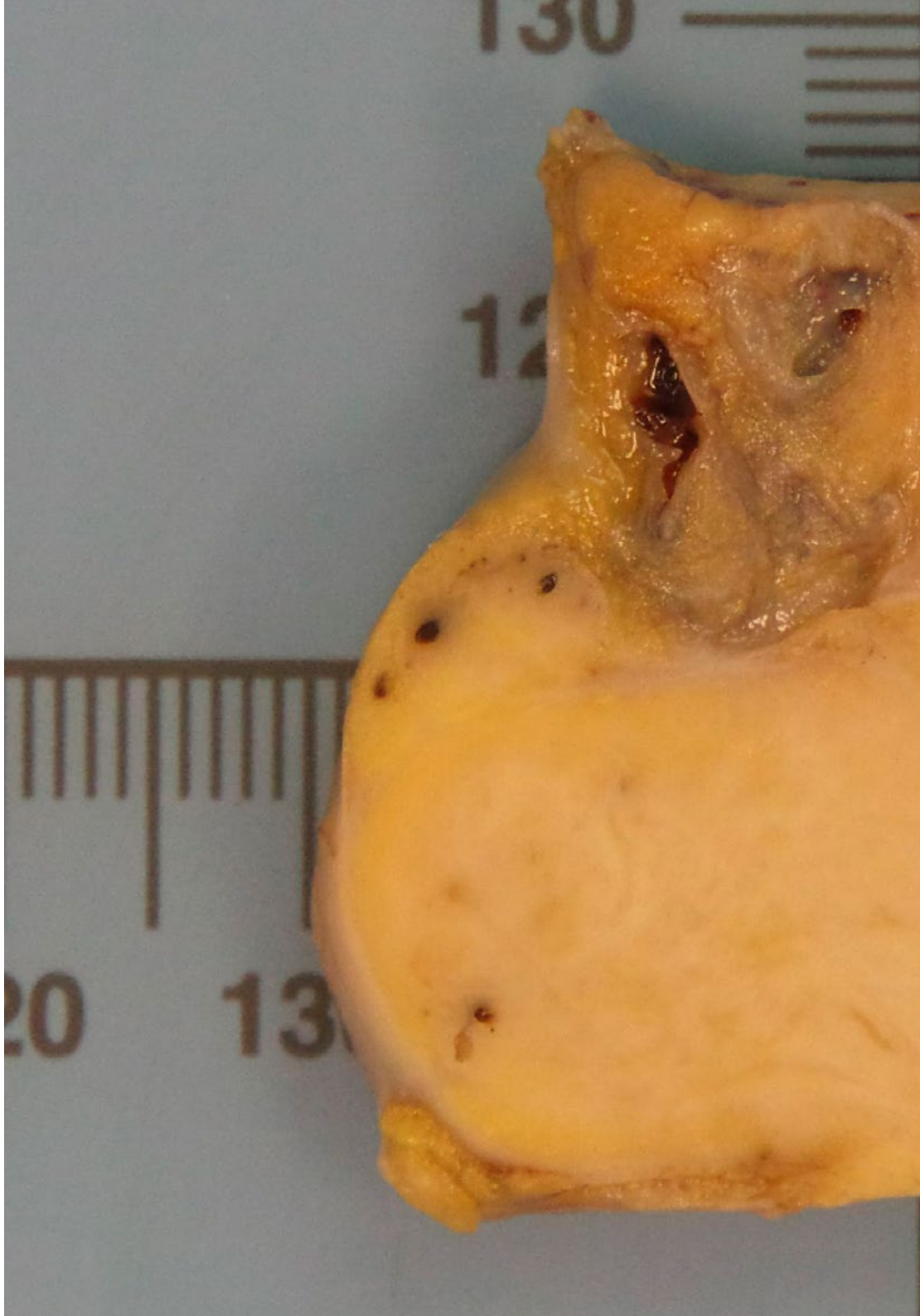
The program in Update on Oncologic Pathology for Pathologists has been designed in such a way that professionals will be able to identify and solve the problems related to this field of medicine, in order to understand the knowledge that will provide a basis for the development of their profession. After passing the program assessments, students will have acquired the professional competencies necessary to provide quality and updated practice based on the most innovative educational methodology.

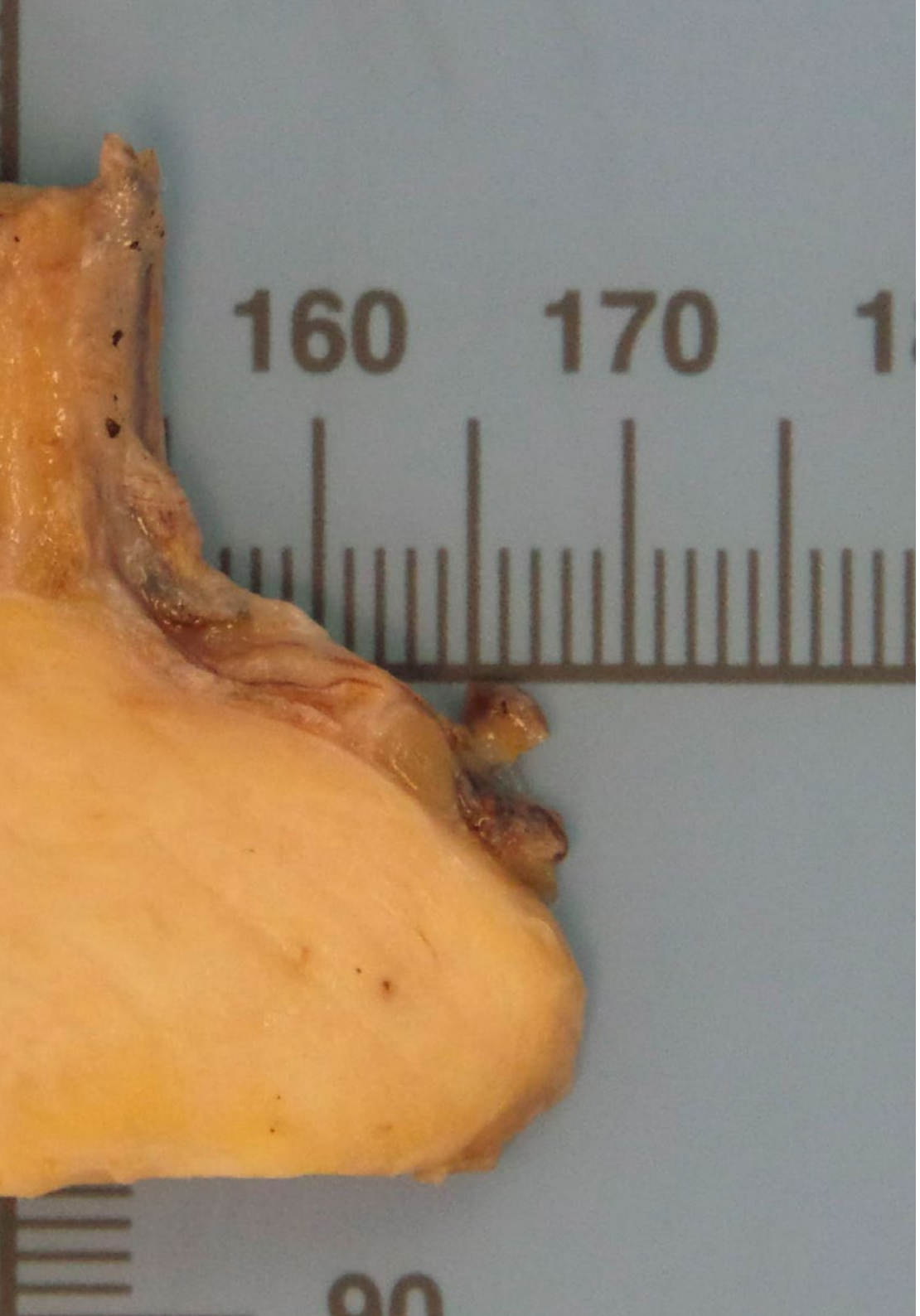


With this program, you will master new techniques and advances in Anatomical Pathology"

Skills

- Possess knowledge of the general characteristics of tumors and the factors that determine their aggressiveness
- Know the incidence and prevalence of the disease worldwide and its different distribution in populations
- Recognize the risk factors that influence the development of malignant tumors related to lifestyles and personal habits
- Develop skills on the use of screening methods for early diagnosis of cancerous lesions
- Acquire 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





Take advantage of the opportunity and take the step to get up to date on the latest developments in Oncologic Pathology"

04

Course Management

In accordance with its maxim of offering an elite education for all, TECH counts on renowned professionals in order for students to acquire solid knowledge in the area of oncologic pathology. The program's teaching staff includes leading experts in oncologic pathologies who contribute their vast work experience to this training program. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.

Leading professionals in the field have come together to teach you the procedural advances in Anatomic 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

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

Management

Dr. Rey Nodar, Severino

- Head of the Anatomic Pathology Department, Hospital Universitario Manises, Synlab Europe Valencia, Spain
- FORESC and FEBIP President (Foundation for Sciences and Research USA / Spanish Foundation for Training in Biomedical Sciences and Oncologic Pathology)
- Doctor Honoris Causa 2012, Bircham International University, USA
- Chief Editor of Journal of Cancer and Tumor International
- Member on the Editorial Board of six international journals (topics related to oncopathology)
- Author: Gland Thyroid Pathology Ed. Bubok 2012 and Endocrine Pathology Text and Atlas Ed. EdStudios, Spain, 2018
- Member of the Sciences Academy of NY, 2011
- Member of The Pathologist's 2019 Power List where recognition is given to the top 100 pioneers in the industry The Power List 2019

Professors

Ms. Abreu Marrero, Aliette Rosa

- Imaging Specialist, Private Hospital of Maputo Lenmed
- Professor at Radiology Institute of Medical Sciences in Camagüey

Dr. Aldecoa Ansorregui, Iban

- Expert in Neuropathology
- Specialist in Pathological Anatomy, La Fe Hospital, Valencia

Mr. Archila Sanz, Iván

- Therapy Department Pathological Anatomy, Barcelona Clinical Hospital

Mr. Ballester Lozano, Gabriel

- Anatomy Pathology Service
- Molecular Biologist at Hospital Vinalopó
- Ribera Salud Group

Dr. Barbella, Rosa

- Expert in breast pathology
- Associate Anatomopathologist, Anatomopathology Department, Albacete General Hospital
- Residency Tutor Faculty of Medicine, University of Castilla-La Mancha

Dr. Buendía Alcaraz, Ana

- Anatomy Pathology Service
- Arcos del Mar Menor University Hospital, San Javier, Murcia

Dr. Camarasa Lillo, Natalia

- Expert in Hemato-Lymphoid Pathology
- Specialist in Pathological Anatomy
- Castellón University Hospital, Valencia

Dr. Cuatrecasas, Miriam

- Specialist in Pathological Anatomy, Barcelona Clinical Hospital
- Expert and Consultant in Gastrointestinal Pathology
- Coordinator of the digestive pathology working group, SEAP
- Coordinator of the Catalan Network of Tumor Banks (XBTC) and the Tumor Bank of the Hospital Clinic-IDIBAPS
- Researcher at IDIBAPS

Dr. Fernández Vega, Iván

- Neuropathologist, Anatomic Pathology Service
- Asturias Central University Hospital Oviedo Spain

Dr. García Yllán, Verónica

- Specialist in Anatomic Pathology and Master's Degree in Medicine and Education
- Inscanner in Medical Services

Dr. Machado, Isidro

- Specialist in Pathological Anatomy
- Valencian Institute of Oncology (IVO), Valencia, Spain
- Expert in Soft Tissue Pathology and Sarcomas

Dr. Labiano Miravalles, Tania

- Expert in Cytology
- Specialist in Pathological Anatomy
- Pamplona, Navarra Hospital Complex

Dr. Ortiz Reina, Sebastián

- Specialist in Pathological Anatomy
- University Specialist in Electron Microscopy, Complutense University of Madrid
- University Specialist in Dermatopathology, University of Alcalá de Henares

- Associate Professor of Health Sciences, Courses on Pathological Anatomy, Complutense University of Madrid
- University Professor of Histology and Cell Biology, University School of Nursing, University of Murcia
- University Professor of Medical Student Internships, Catholic University of Murcia
- Residency Tutor of Pathological Anatomy, University Complex of Cartagena

Dr. Ribalta Farrés, Teresa

- Professor of Anatomic Pathology, Universitat de Barcelona
- Expert in Neuropathology, Pediatric Pathology (present)
- Chief of Anatomic Pathology Service, Hospital Sant Joan de Déu

Dr. Rojas, Nohelia

- Specialist in Pathological Anatomy
- Vinalopó and Torrevieja University Hospitals

Mr. Rubio Fornés, Abel

- Mathematician
- Expert in Statistics and Operations Research University of Valencia

Ms. Sansano Botella, Magdalena

- Degree in Criminology, University of Alicante
- Specialist Technician in Pathological Anatomy, University of Alicante
- Pathological Anatomy Service, Vinalopó Hospital

Dr. Serrano Jiménez, María

- Anatomic Pathology Department Physician
- Vinalopó Hospital

Dr. Soto García, Sara

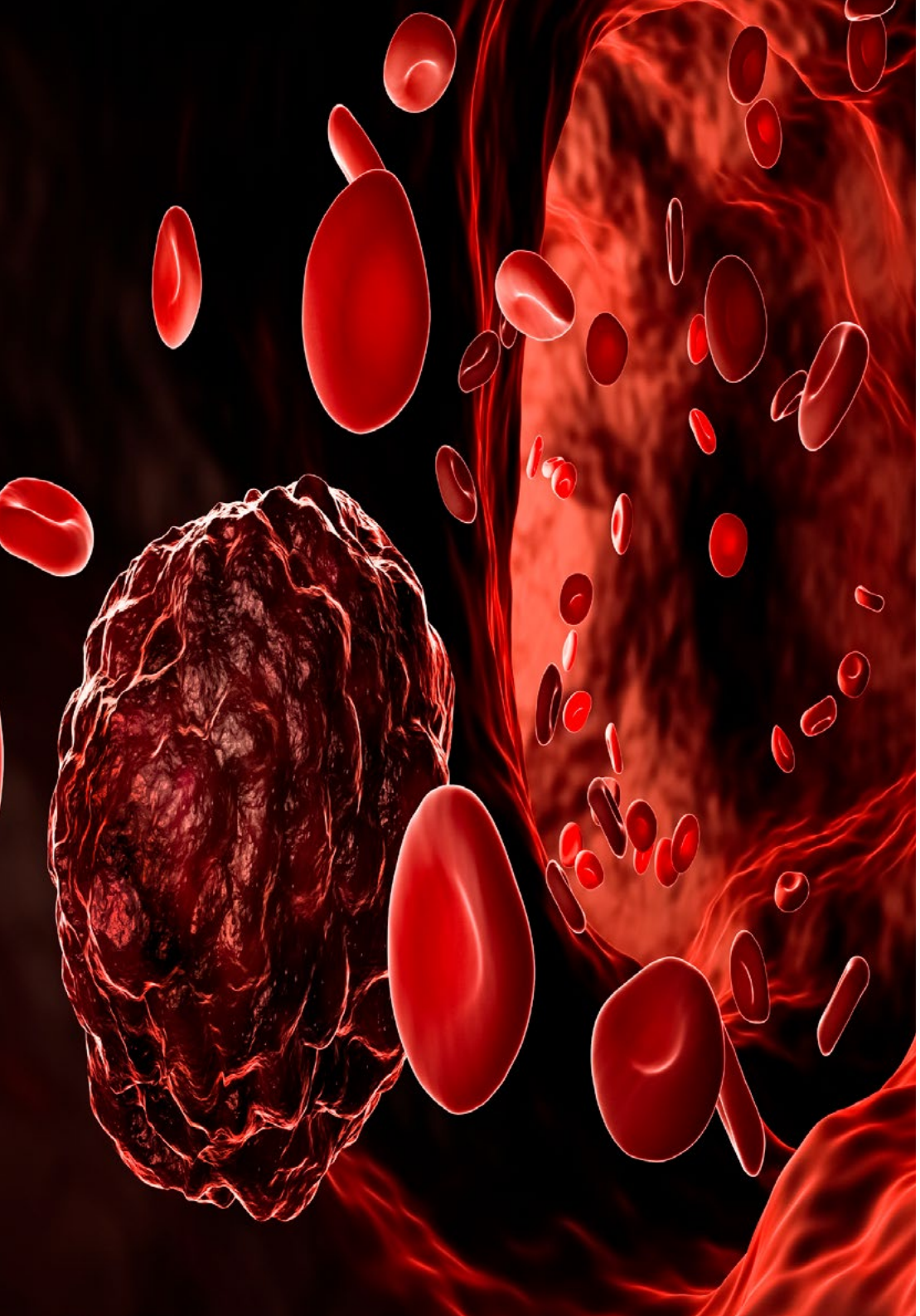
- Specialist Physician, Torrevieja and Vinapoló University Hospitals

Dr. Sua Villegas, Luz Fernanda

- Specialist in Pathological Anatomy
- Specialist in Clinical Pathology
- Doctor in Biomedical Sciences with focus on Solid Tumor Genomics
- Medical Leader of Special Hematology and Hemostasis Laboratory
- Department of Pathology and Laboratory Medicine, Fundación Valle del Lili

Dr. Villar, Karen

- Medical Pathologist
- Pathology Consultation Coordinator

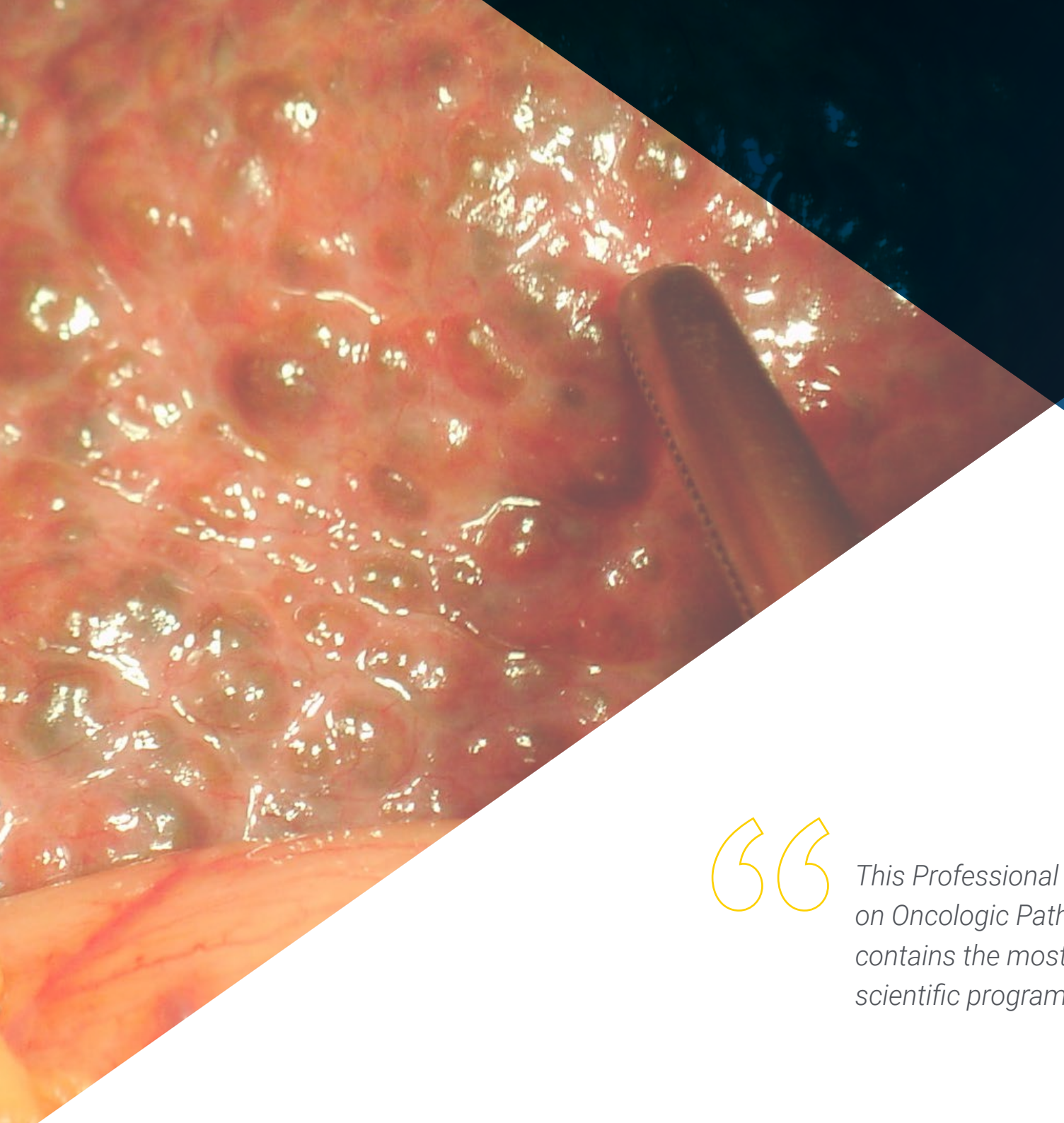


Take the opportunity to learn about the latest advances in this area in order to apply it to your daily practice"

05

Structure and Content

The structure of the content has been designed by leading professionals in Anatomical Pathology, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to diagnosis. From module 1, students will see their knowledge broadened, which will enable them to develop professionally, knowing that they can count on the support of a team of experts.



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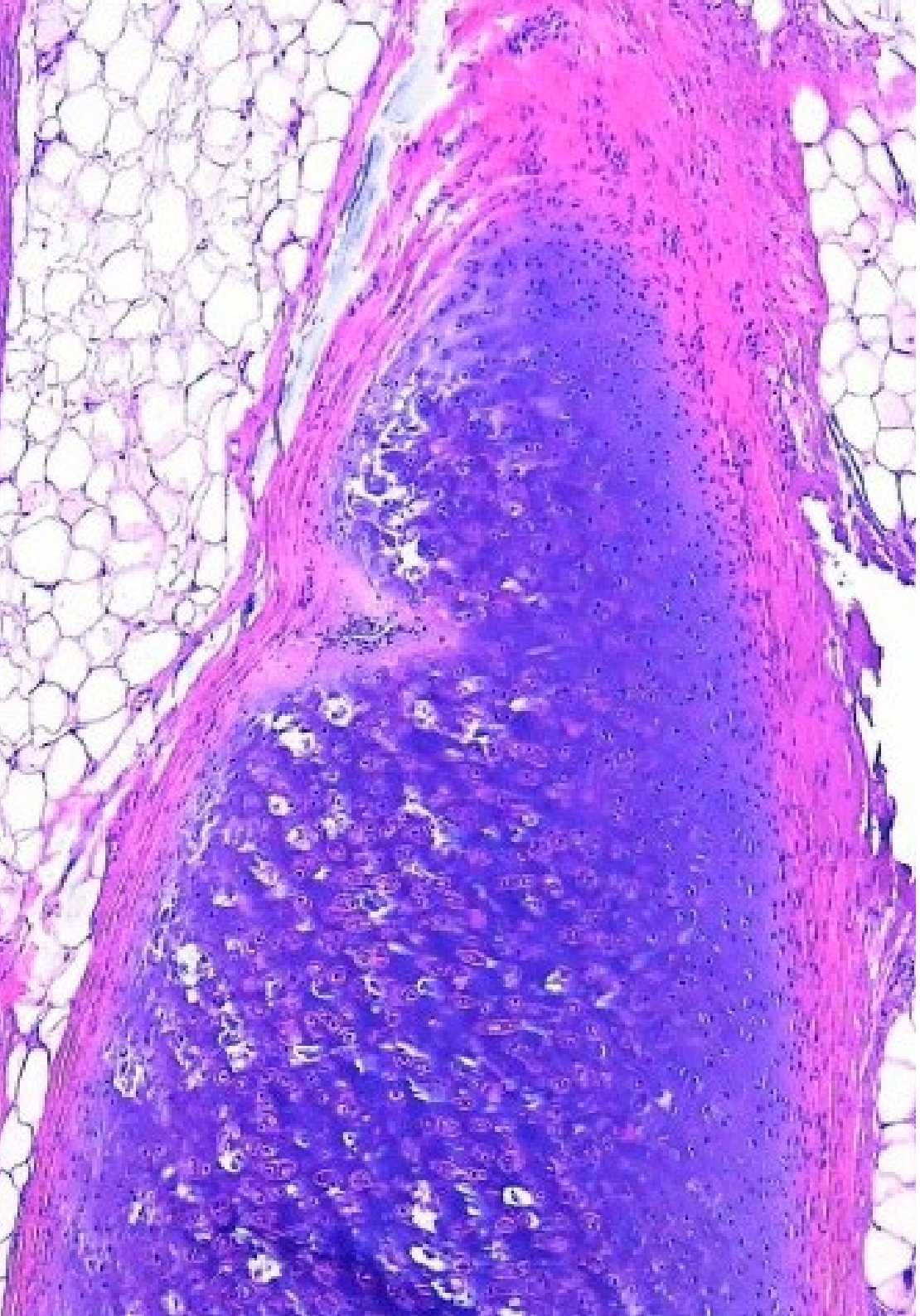
Module 1. Cancer: General Aspects Risk Factors

1.1. Introduction
1.2. Overview of Malignant Neoplasms
  1.2.1. Nomenclature
  1.2.2. Features
  1.2.3. How Metastases Spread
  1.2.4. Prognostic Factors
1.3. Epidemiology of Cancer
  1.3.1. Incidence
  1.3.2. Prevalence
  1.3.3. Geographical Distribution
  1.3.4. Risk Factors
  1.3.5. Prevention
  1.3.6. Early Diagnosis
1.4. Mutagenic Agents
  1.4.1. Environmental Factors
  1.4.2. Work
  1.4.3. Toxic Substances in Food
1.5. Biological Agents and Cancer
  1.5.1. RNA Virus
  1.5.2. DNA Virus
  1.5.3. H. Pylori
1.6. Genetic Predisposition
  1.6.1. Genes Linked to Cancer
  1.6.2. Susceptibility of Genes
    1.6.2.1. Breast Tumors
    1.6.2.2. Lung Tumors
    1.6.2.3. Thyroid Tumors
    1.6.2.4. Colon Tumors
    1.6.2.5. Skin Tumors
    1.6.2.6. Bone Tumors
    1.6.2.7. Pancreatic Tumors
    1.6.2.8. Neuroblastoma
1.7. Clinical Aspects of Malignant Neoplasms
  1.7.1. Introduction
1.8. Neoplastic Disease Staging
  1.8.1. 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. Mutation-Causative Agents
    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. Alzheimer's 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 Tumors

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. Global Spread
- 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. Ovarian (Dr. María Serrano)
- 7.1.1. Epidemiology
  - 7.1.1.1. Hereditary Ovarian Cancer
- 7.1.2. Classification
  - 7.1.2.1. Update and Concepts
  - 7.1.2.2. Epithelial Surface 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. Vulvar (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

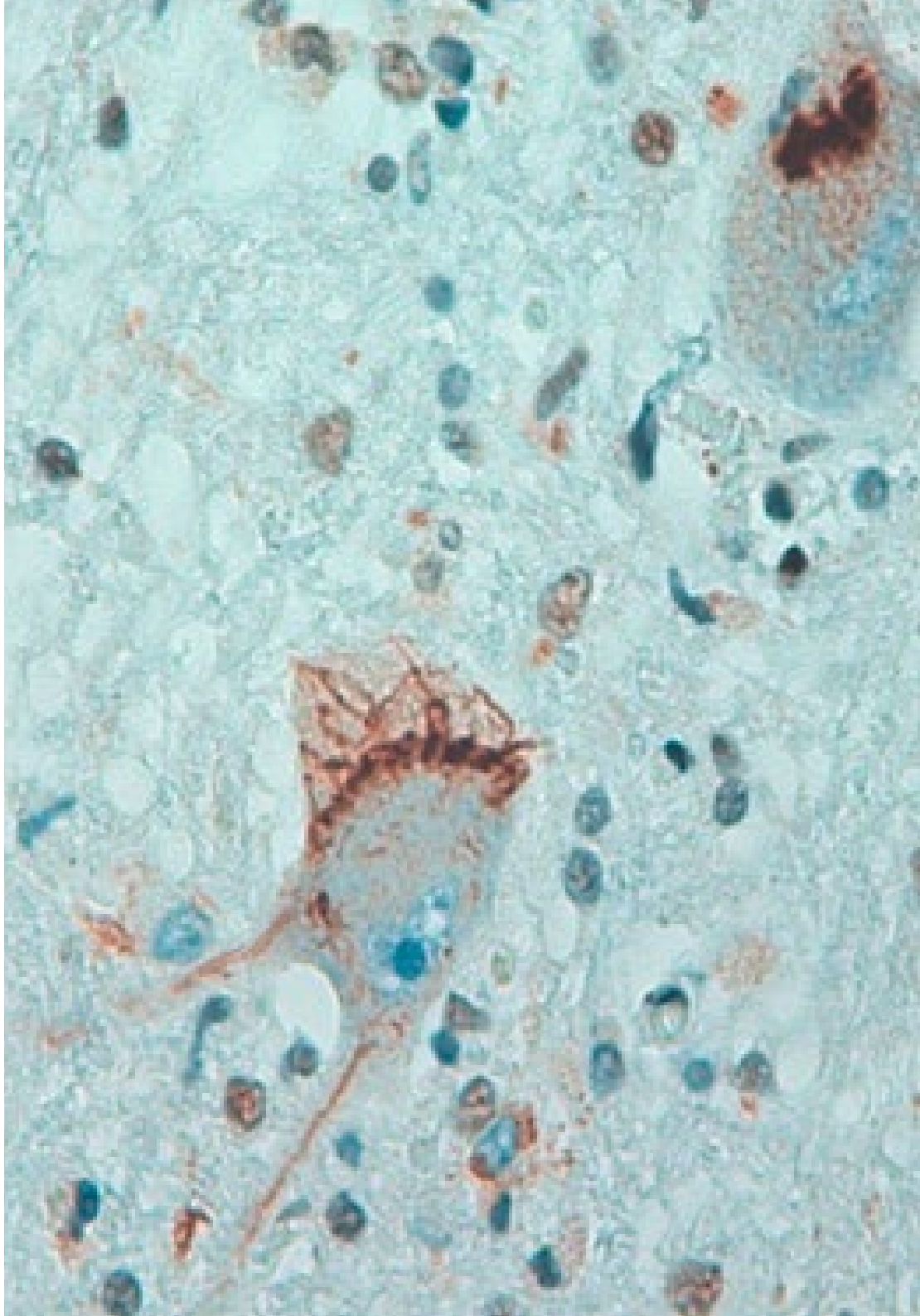
7.3. Uterine (Dr. Sara Soto)
- 7.3.1. OMS Classification
  - 7.3.1.1. Update
- 7.3.2. Types of Uterine Epithelial Carcinomas
  - 7.3.2.1. Immunohistochemistry
  - 7.3.2.2. Molecular Aspects
- 7.3.3. Uterine Sarcomas
  - 7.3.3.1. Update
- 7.3.4. Other Malignant Uterine Neoplasms
  - 7.3.4.1. Update
- 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. "Pre-Malignant" 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 Lymphomas
- 8.5.3. Mycosis Fungoides
- 8.5.4. CD30+ Lymphoproliferative Processes
- 8.5.5. Primary Cutaneous T Lymphomas
- 8.5.6. B Lymphomas
- 8.5.7. Marginal Zone B lymphomas
- 8.5.8. Follicular Center B Lymphomas
- 8.5.9. Diffuse Large Cell B 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 Tumors
- 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. Gastrointestinal Stromal Tumors (GIST)
- 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 Hodgkin's 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. Immunocytohistochemistry
- 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 to 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. Image-Guided 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
- 12.3.1. RECIST 1.1 and Chung
- 12.3.2. EASL, m-RECIST and RECICL
- 12.3.3. MacDonald and RANO Criteria
- 12.3.4. CHOI, MDA, and Lugano Criteria
- 12.3.5. Modified CHOI Criteria; SCAT and MASS
- 12.3.6. MET-RAD-P
- 12.3.7. PERCIST
- 12.3.8. Immunotherapy

12.4. Treatment Complications
- 12.4.1. Oncologic Emergencies
- 12.4.2. 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. Global Spread
- 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 Databases
      - 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 Semistructured
    - 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

A unique, key, and decisive training experience to boost your professional development"

06

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

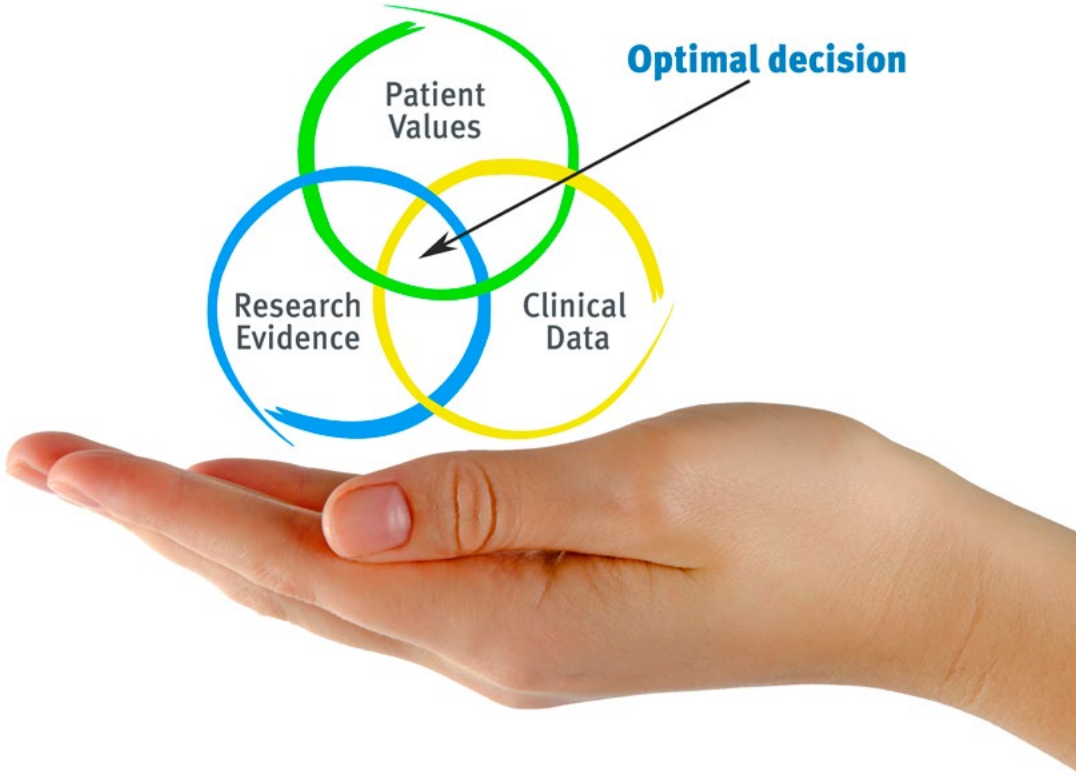
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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:

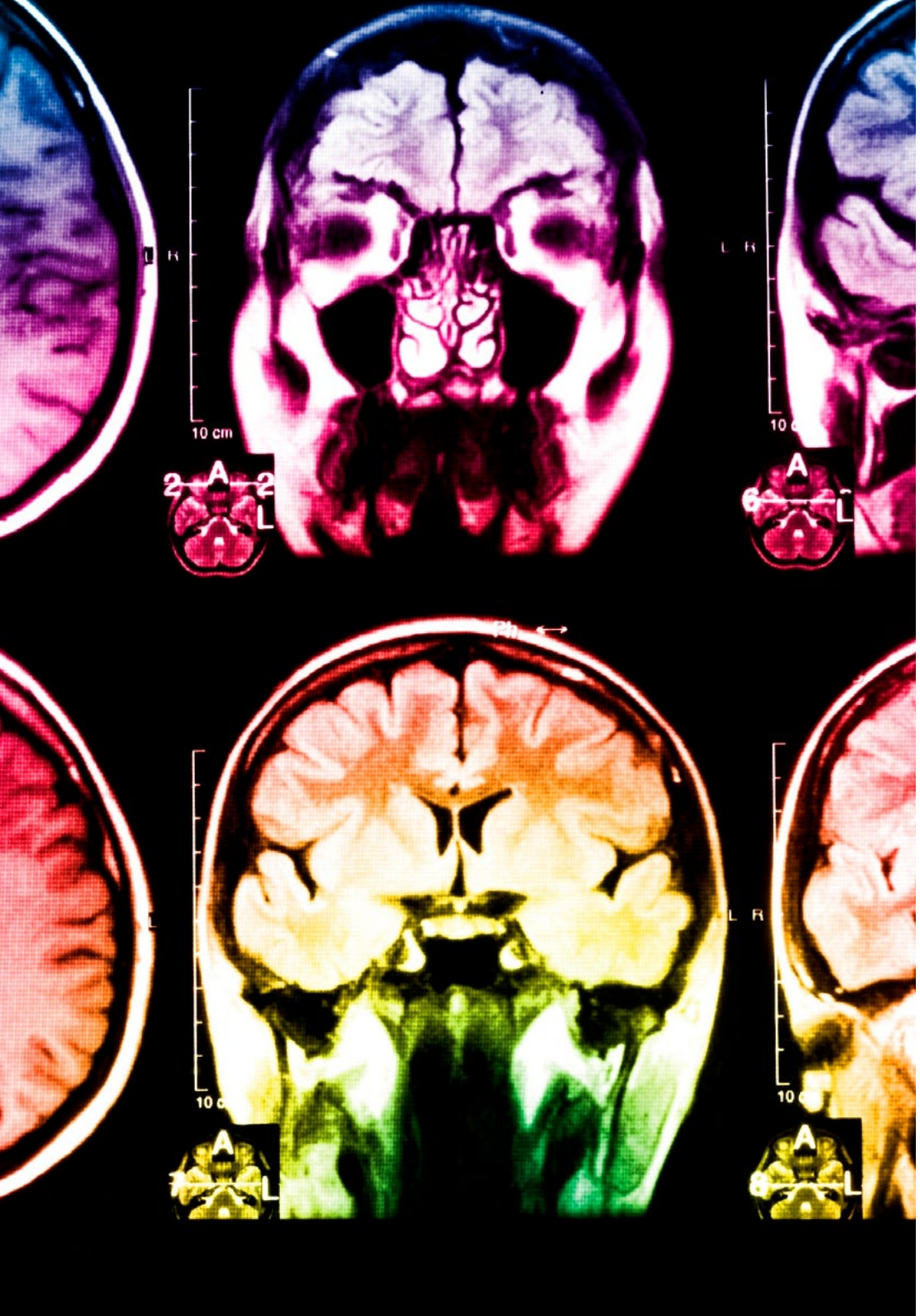
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better 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.

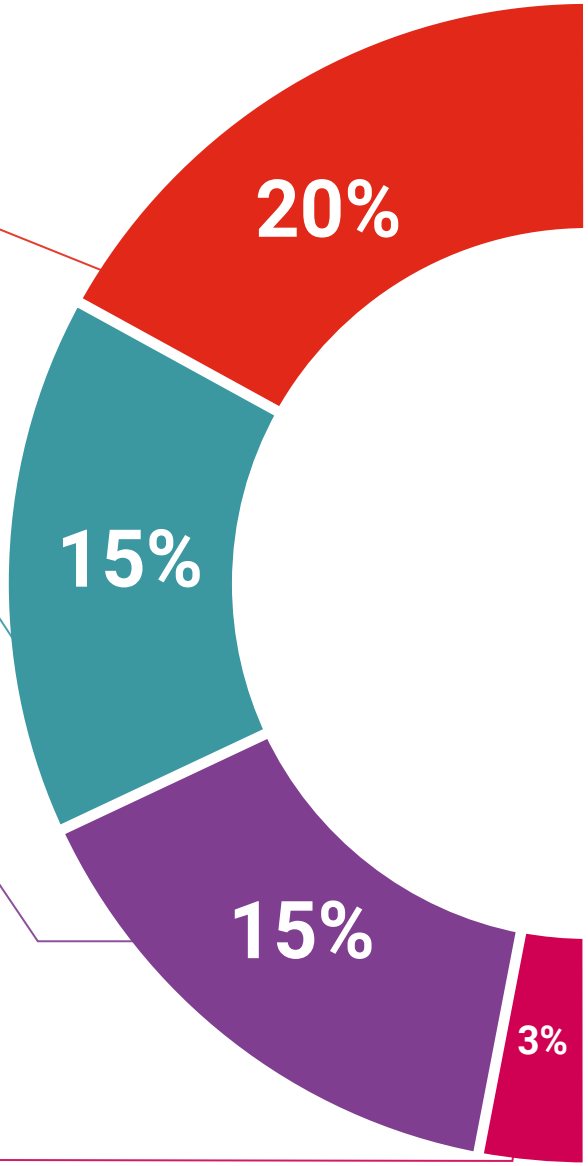
Interactive Summaries

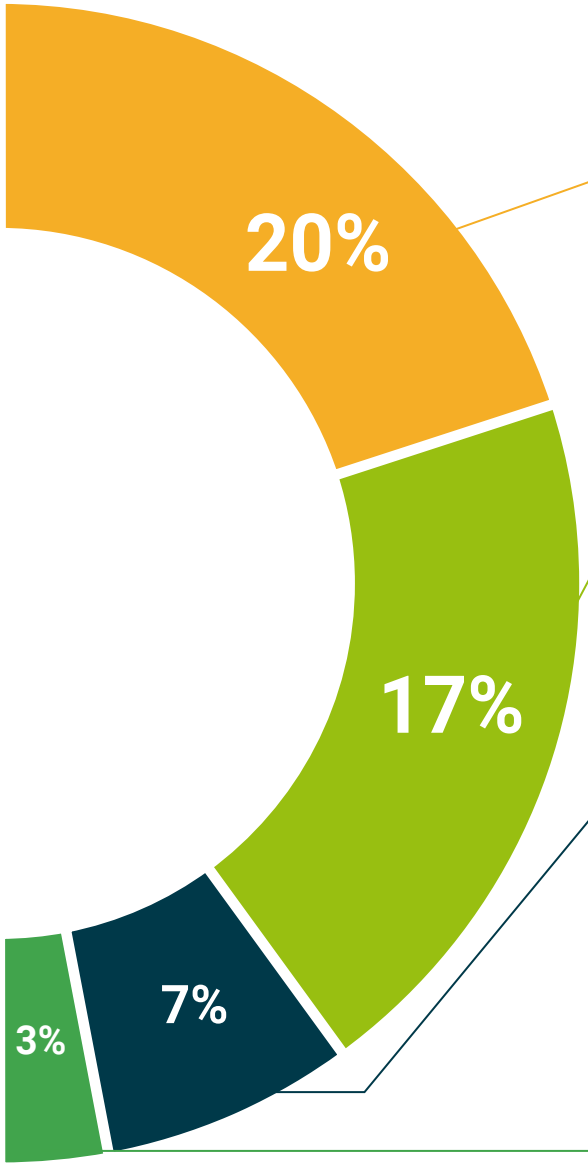
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.

06

Certificate

The Professional Master's Degree in Update on Oncologic Pathology for Pathologists guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Technological University.

Successfully complete this program and receive your university degree without travel or laborious paperwork”

This **Professional Master's Degree in Update on Oncologic Pathology for Pathologists** contains the most complete and updated scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will express the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

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

Official Nº of hours: **1,500 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having successfully passed and accredited the following program

PROFESSIONAL MASTER'S DEGREE

in

Update on Oncologic Pathology for Pathologists

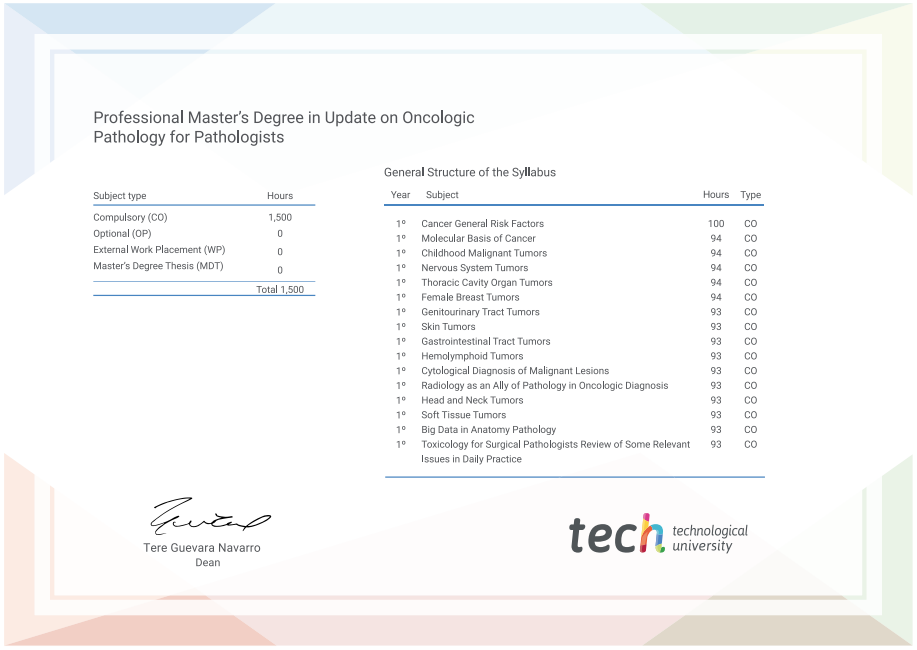
This is a qualification awarded by this University, equivalent to 1,500 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
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


Professional Master's Degree in Update on Oncologic Pathology for Pathologists

Subject type	Hours
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	Hours	Type
1º	Cancer General Risk Factors	100	CO
1º	Molecular Basis of Cancer	94	CO
1º	Childhood Malignant Tumors	94	CO
1º	Nervous System Tumors	94	CO
1º	Thoracic Cavity Organ Tumors	94	CO
1º	Female Breast Tumors	94	CO
1º	Genitourinary Tract Tumors	93	CO
1º	Skin Tumors	93	CO
1º	Gastrointestinal Tract Tumors	93	CO
1º	Hemolymphoid Tumors	93	CO
1º	Cytological Diagnosis of Malignant Lesions	93	CO
1º	Radiology as an Ally of Pathology in Oncologic Diagnosis	93	CO
1º	Head and Neck Tumors	93	CO
1º	Soft Tissue Tumors	93	CO
1º	Big Data in Anatomy Pathology	93	CO
1º	Toxicology for Surgical Pathologists Review of Some Relevant Issues in Daily Practice	93	CO

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

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Professional Master's Degree

Update on Oncologic Pathology for Pathologists

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Professional Master's Degree

Update on Oncologic Pathology for Pathologists

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