Master's Degree

Endocrine Oncologic Pathology

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Master's Degree

Endocrine Oncologic Pathology

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Global University**
- Credits: **60 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/medicine/master-degree/master-endocrine-oncologic-pathology

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01

Introduction

Diabetes and obesity are chronic diseases that, unfortunately, afflict a large part of the population. This means that this demographic is more exposed to Cancer Pathologies related to the Endocrine System, mainly in organs such as the colon, kidney, liver or pancreas. Generally, the collaboration between Oncologists and Endocrinologists has been limited to the assistance of patients with Advanced Cancer, but in a new reality where these ailments affect millions of people around the world, there is a need for medical figures that combine these two branches. With this TECH degree, physicians will train in a highly demanded field, where their unique and distinctive expertise will serve to significantly increase their professional value and career advancement possibilities.

Endocrine Oncology is the best choice you can make to specialize in a field that affects millions of people"

Diabetes and Obesity pose a real risk for developing Cancer Pathologies, so medical practitioners must be prepared to deal with complex Oncological Cases, where nutrition plays a key role in the future prevention of different Types of Cancers. That is where the endocrine specialty comes into play, where healthcare professionals can identify all the specific Oncological Pathologies of this System to obtain better diagnoses and preventive treatments for patients.

For this reason, TECH has gathered in this Master's Degree in Endocrine Oncologic Pathology the best knowledge of Hypothalamic-Pituitary Tumor Pathology, Thyroid Node management, Adrenal Cortex Tumors and other types of Oncological Conditions directly related to the Endocrine System.

Thanks to this specialty, physicians graduating from this degree will have a much better understanding of a field of Oncology that has become vitally important in recent years. This will allow them to become key members of their medical team, being the main link between the Departments of Oncology and Endocrinology to deal with patients with complex pathologies that require the most specialized attention.

Furthermore, students have the advantage of being able to take this Master's Degree completely online, being able to download the entire syllabus from the first day of the program. At TECH, it is students who set the guidelines and pace of study, without adhering to predetermined schedules or classes.

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

- Case studies presented by experts in Endocrine Oncologic 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
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Access to content from any fixed or portable device with an Internet connection

Achieve your career goals by helping patients with complex and delicate oncological pathologies that require the best professionals"

Are you ready to take your medical career to the next level? Join the TECH team and take a firm step forward in your department"

This degree will be key when dealing with complex cases, in which your expertise and professionalism will stand out.

Connect the Oncology and Endocrinology Departments at your hospital and become essential for your team.

The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training 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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

Knowing this is a fundamental field of knowledge for the growth of any physician, TECH is convinced this Master's Degree should be focused on the professional improvement of its students, offering them the best possible knowledge in Endocrine Oncologic Pathology. Thanks to a unique and in-demand distinction in the field of Oncology, graduates will end up having ample opportunities to improve their current station, as well as their own medical prestige.

TECH will exceed your best academic expectations with a human, professional and technical quality unparalleled in the medical field"

General Objectives

- Deepen the knowledge, diagnosis and treatment of Endocrine Oncologic Pathology
- Achieve an update in the most novel aspects in the Diagnosis and Treatment of Endocrine Oncologic Pathology
- Advance in the Multidisciplinary Approach essential for the Management of Endocrine Oncologic Pathology

Enroll today in this Master's Degree and don't wait any longer to become the health professional you aspire to be"

Specific Objectives

Module 1. Hypothalamic-Pituitary Tumor Pathology

- Acquire a deep understanding of the clinical manifestations and diagnosis of functioning and non-functioning pituitary tumors
- Delve deeper into the Surgical Treatment of Hypothalamic-Pituitary Region Tumors, the Approach Routes, the Perioperative Management, and the Postoperative Functional Evaluation
- Know the indications and types of pharmacological treatment for the different types of tumors
- Gain in-depth knowledge of the Indications and Types of Radiotherapy, its efficacy, side effects and the Indications for other Treatments

Module 2. Thyroid Nodule Management: Parathyroid Tumors

- Gain deeper knowledge of the Thyroid Nodule Approach
- Delve deeper into the usefulness, characteristics and classifications of Diagnostic Tests
- Advance in the knowledge of Indications and Complications in Ethanolization and Ablation Techniques
- Delve deeper into the approach to primary hyperparathyroidism

Module 3. Differentiated Thyroid Carcinoma (DTC)

- Update knowledge of the pathogenesis of DTC
- Gain further knowledge of the Diagnosis and Treatment Indications
- Advance in the knowledge of Target Therapies in Advanced Unresectable TDC
- Delve deeper into the importance of a Multidisciplinary Approach

Module 4. Medullary Thyroid Carcinoma (MTC): Other Thyroid Carcinomas

- Delve deeper into the diagnosis and treatment of MTC
- Gain deeper knowledge of other malignant thyroid tumors
- Optimize monitoring and prognosis of malignant thyroid tumors not derived from follicular epithelium

Module 5. Adrenal Cortex Tumors

- Advance understanding of incidentally discovered adrenal nodule
- Delve deeper into the diagnosis of ACTH-independent hypercortisolism
- Delve deeper into the differential diagnosis of primary hyperaldosteronism due to adenoma caused by hyperplasia
- Delve deeper into the diagnosis, treatment and monitoring of adrenal carcinoma Multidisciplinary Approach

Module 6. Pheochromocytomas and Paragangliomas

- Advance in the Molecular Bases of these Tumors and the importance of Genetic Studies
- Delve deeper into the diagnosis, treatment and monitoring of Pheochromocytomas and Paragangliomas

Module 7. Multiple Endocrine Neoplasia Syndromes

- Advance in the knowledge of the Hereditary Syndromes of Multiple Endocrine Neoplasia
- Gain deeper understanding of how to monitor gene mutation carriers for the different syndromes
- Evaluate and monitor family members and relatives

Module 8. Gastroenteropancreatic Neuroendocrine Tumors (GEP-NETs)

- Delve deeper into the Epidemiology and the Molecular and Cellular Bases for GEP-NETs
- Advance understanding of the diagnosis, treatment, monitoring and prognosis of GEP-NETs in different locations: pulmonary, gastric, intestinal and appendiceal

Module 9. GEP-NET: Anatomical and Functional Diagnosis Treating Locoregional Disease

- Advance the knowledge of Carcinoid Syndrome and Carcinoid Cardiopathy
- Delve deeper into the different types of Ectopic Hormone Secretion
- Approach the Diagnosis of GEP-NET: Molecular Markers, Echoendoscopy, and Imaging Tests
- Gain comprehensive knowledge of the Monitoring and Evaluation of Treatment Response
- Delve deeper into the Indications for the Treatment of G3 GEP-NETs

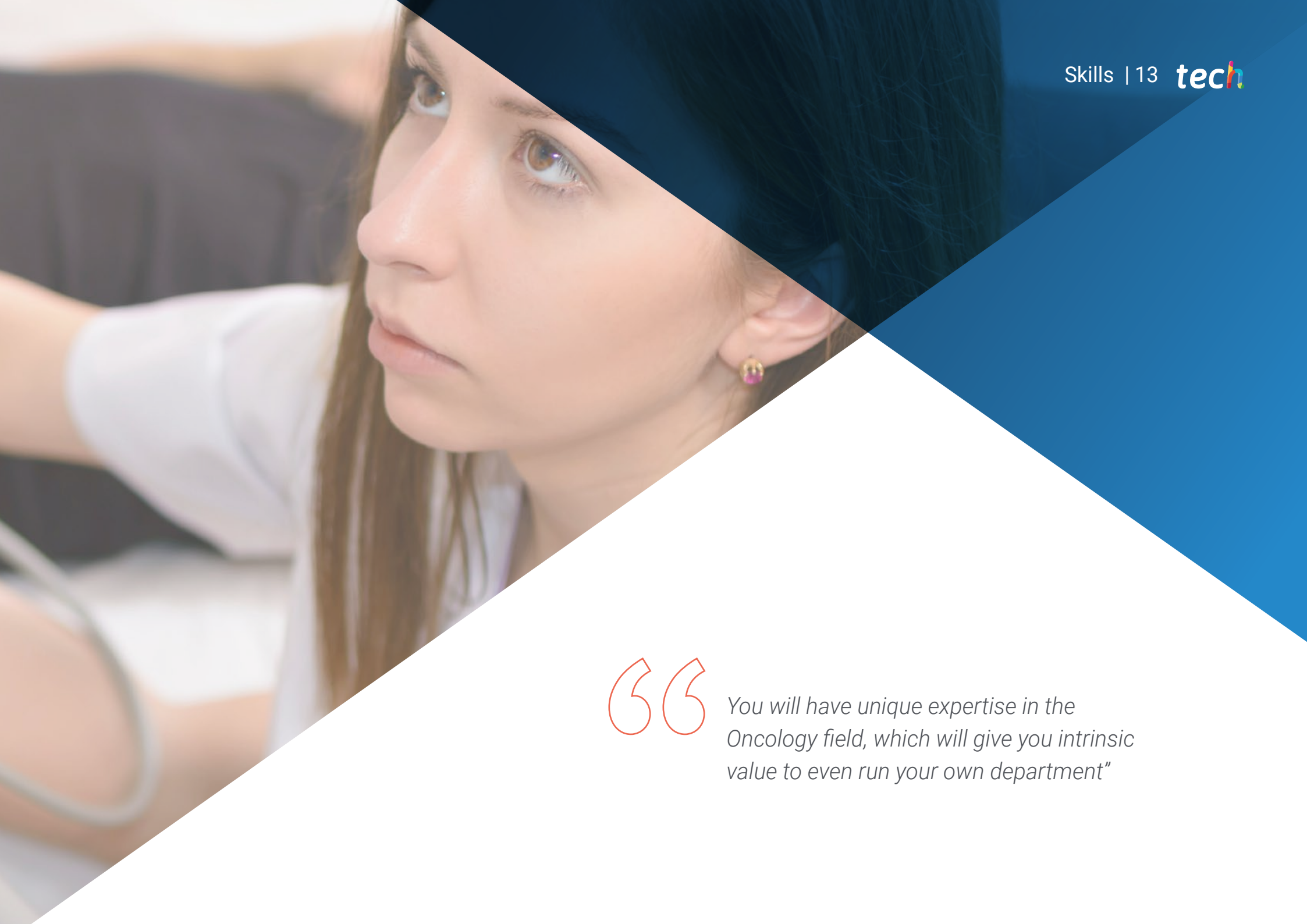
Module 10. Gastroenteropancreatic Neuroendocrine Tumors: Treating Advanced Stages of the Disease

- Know how to approach Advanced Stages of the Disease
- Gain deeper knowledge of the Surgical Treatment of Advanced Disease
- Advance knowledge of Pharmacological Treatments in Advanced Disease: Biological Treatments, Targeted Therapies, and Immunotherapy
- Acquire deeper knowledge of Radionuclide Therapy Treatment: Theragnosis
- Delve deeper into the Nutritional Approach potentially required by some Endocrine Tumor patients
- Advance in the Multidisciplinary Approach

03

Skills

Since Obesity and Diabetes are the main cause of many Oncologic Complications in patients, physicians will acquire throughout this program the necessary skills to effectively address Endocrine Pathologies of all types, from Neuroendocrine Gastroenteropancreatic Tumors to other not so frequent ones such as Pheochromocytomas and Paragangliomas. Thus, professionals will have a unique set of skills that will make them stand out from the rest of fellow Oncologists.

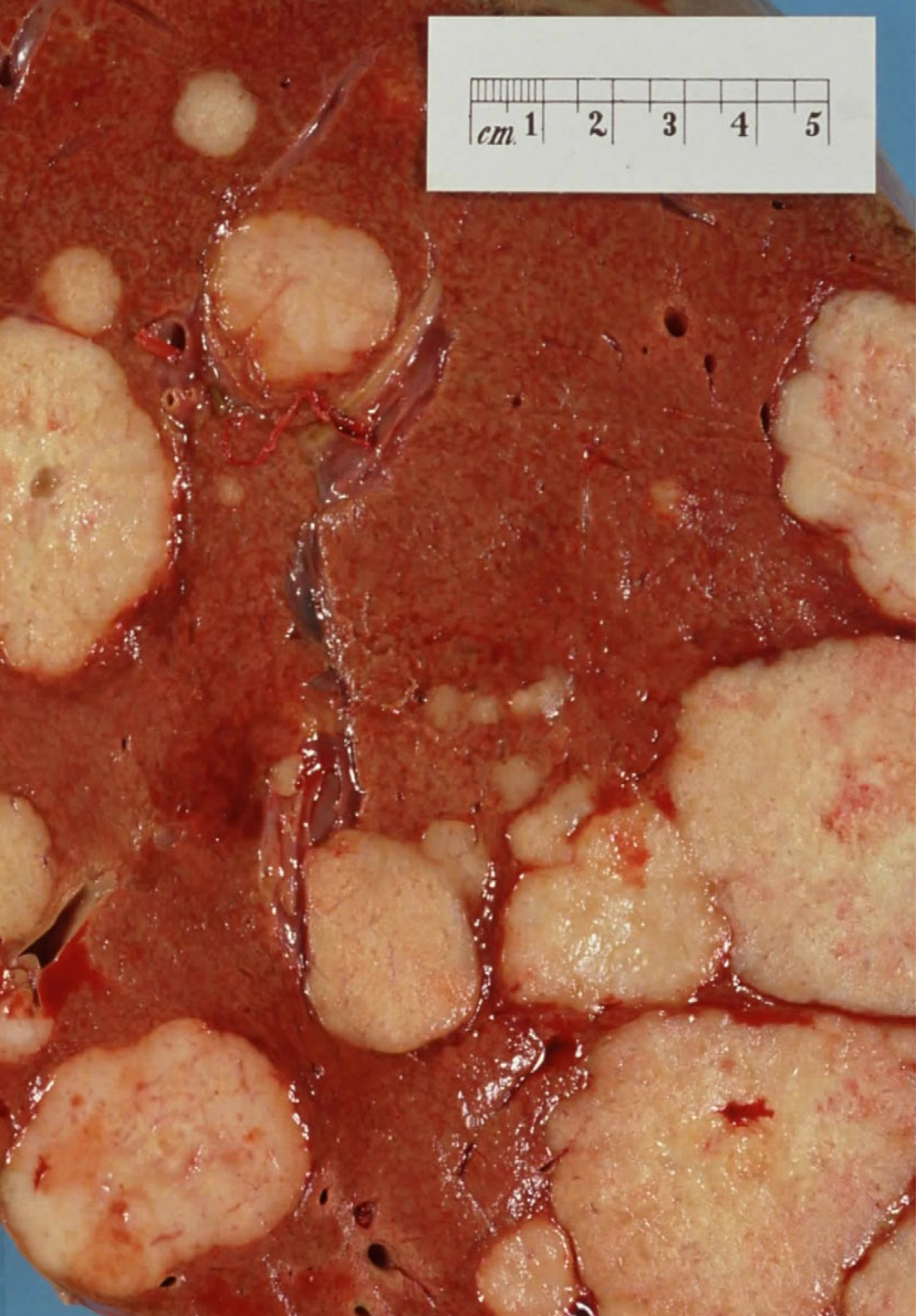


You will have unique expertise in the Oncology field, which will give you intrinsic value to even run your own department"

General Skills

- Identify the different clinical pathologies for Endocrine Oncologic Pathology
- Approach different cases of Endocrine Oncologic Pathology in a multidisciplinary way
- Handle the approach to Advanced Diseases
- Delve deeper into the different available Diagnostics to create effective Treatments and Monitoring

You will improve your patients' treatments and lives, with accurate advice and diagnosis, appropriate to each type of pathology"



Specific Skills

- Acquire deeper knowledge of the Tumors in the Hypothalamic-Pituitary Region, their Pathogenesis, Anatomopathological Aspects and classification
- Gain a deeper understanding of the indications and extent of surgical treatment Its complications: Potential complications Subsequent monitoring
- Optimize the assessment of Treatment Response
- Identify the different Thyroid Carcinomas
- Diagnose Adrenal Node functionality
- Advance in the knowledge of Chromaffin Tissue Tumors
- Recognize the Multiple Endocrine Neoplasia Syndromes and the correct approach
- Have thorough knowledge of the diagnosis, treatment, monitoring and prognosis for Functioning and Non-Functioning Pancreatic NETs
- Delve deeper into the surgical treatment of GEP-NETs in different locations
- Know exhaustively the sequencing of the different treatments for Gastroenteropancreatic Neuroendocrine Tumors

04

Course Management

TECH only chooses the best professionals, with proven medical and endocrine experience, to develop all the topics for this Master's Degree in Endocrine Oncologic Pathology. Thus, with a personalized, expert and close teaching orientation, students will be supported by a team that wants to see them grow within the field of Oncology, giving them all the knowledge and tools possible to become an outstanding leader in the field.

Join a team of people who already know what it's like to run hospital sections and take advantage of their top tips on Endocrine Oncologic Pathology"

International Guest Director

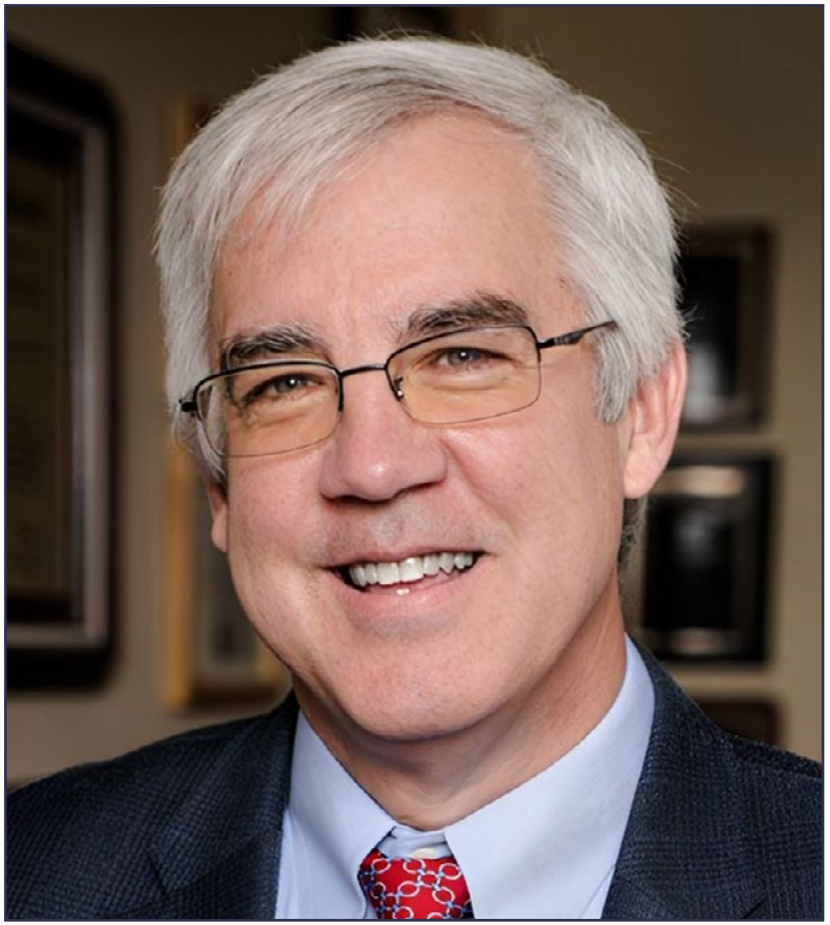
Dr. R. Michael Tuttle has developed, for more than 3 decades, a successful career in the medical field of Endocrinology. Thanks to his exceptional skills, this expert has received numerous international awards. He has received the Lewis Braverman Lectureship Award from the American Thyroid Association and the Knoll Pharmaceutical Mentor Award from the Endocrine Society.

He has also recently served as Clinical Director of the Endocrine Service at Memorial Sloan Kettering Hospital. He is also a permanent academic collaborator at Cornell University Medical School in New York.

In addition, Dr. Tuttle has distinguished himself on the clinical-research level. Specifically, he has delved deeply into the study of Thyroid Cancer and his work in this field has changed the paradigm regarding differentiated treatments (DTC) for this disease. Prior to his therapeutic innovations, all patients were treated with Total Thyroidectomy and Radioactive Iodine (RAI). However, this expert was one of the pioneers in using serum Thyroglobulin (Tg) as an indicator of residual DTC.

As such, he has led international studies that demonstrated the efficacy of recombinant thyrotropin (rhTSH) in determining TSH-stimulated Tg. This also led to the stratification of patients into risk categories and reduced the number of ionizing radiations. Together with his molecular analyses, his clinical work has opened a new scenario for multikinase inhibitor (TKI) therapies for radioiodine therapy-resistant DTC.

On the other hand, he has been a consultant to the Center for Disease Control for Radiation Exposure of Peoples in the Marshall Islands, the Hanford Downwinder Project, and a consultant to the National Academy of Sciences for Radiation Exposed Populations.



Dr. Tuttle, R. Michael

- Clinical Director of the Endocrinology Service at Memorial Sloan Kettering Cancer Center
- Specialist in Thyroid Cancer and Radioiodine Therapy.
- Academic Advisor, Cornell University Medical School, New York
- Fellowship at the Madigan Army Medical Center
- Residency in Medical Endocrinology at Dwight David Eisenhower Army Medical Center
- M.D. from the University of Louisville
- B.S. in Biology, Northern Kentucky University
- Member of:
  - Endocrine Society
  - American Thyroid Association
  - American Association of Endocrine Surgeons
  - American Association of Clinical Endocrinologists

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

Management

Dr. Álvarez Escola, María Cristina

- Head of the Endocrinology and Nutrition Service at La Paz University Hospital
- Resident Tutor in the Endocrinology and Nutrition Service at the La Paz University Hospital
- Coordinator for the Endocrine Tumors Committee at La Paz University Hospital
- Coordinator for the Pituitary Tumors Committee and the Selar Area at La Paz University Hospital
- Coordinator for the SENDIMAD Neuroendocrinology Group
- Member of the National Commission of Endocrinology and Nutrition, Ministry of Health, Spain
- PhD in Medicine and Surgery from the University of Alcalá de Henares

Dr. Fernández Martínez, Alberto

- Assistant Physician Specialist in General Endocrinology at Móstoles University Hospital
- Attending physician specializing in Endocrinology and Nutrition at La Paz University Hospital
- Degree in Medicine from the University of Barcelona
- Postgraduate Specialization in Neuroendocrinology at the Oxford Centre for Diabetes, Endocrinology and Metabolism
- Endocrinology Team Assistant responsible for educational activities for diabetic patients at the Gran Canaria Diabetic Association
- Collaborating monitor for health education activities for diabetic patients

Dr. Blanco Carrera, Concepción

- Endocrinology and Nutrition Resident Tutor at Príncipe de Asturias Hospital
- Specialist Physician in Endocrinology and Nutrition, Area III Specialized Care
- Medical Specialist in the Endocrinology Service at Albacete General Hospital
- PhD in Medicine and Surgery from the Autonomous University of Madrid.
- Specialist in Endocrinology and Nutrition, MIR training at Puerta de Hierro Hospital
- Master's Degree in Health Care Unit Clinical Management at Universidad Internacional Menéndez Pelayo

Professors

Dr. Fajardo Montañana, Carmen

- Head of the Endocrinology Service at La Ribera University Hospital
- Associate Editor for the Endocrinology, Diabetes and Nutrition Journal (Elservier)
- Active member of the Neuroendocrinology Area, Spanish Society of Endocrinology
- Member of the Board of Directors, Spanish Society of Endocrinology and Nutrition Therapy
- Member of the Board of Directors, Spanish Society Foundation of Endocrinology and Nutrition Therapy
- Degree in Medicine and Surgery from the University of Valencia

Dr. Familiar Casado, Cristina

- Medical Specialist in Endocrinology and Nutrition at San Carlos Clinic University Hospital
- Member of the Tumor Committee at San Carlos Clinic University Hospital
- Responsible for Thyroid Nodule Monographic Consultations
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Specialist in Endocrinology, Metabolism and Nutrition, MIR training at Hospital Clínico Universitario San Carlos in Madrid

Dr. Riesco Eizaguirre, Garcilaso

- Head of the Endocrinology and Nutrition Service at Móstoles University Hospital
- PhD in Medicine from the Autonomous University in Madrid
- Degree in Medicine and Surgery from the University of Alcalá de Henares
- Master's Degree in Health Care Unit Clinical Management at Universidad Internacional Menéndez Pelayo

Dr. Anda Apiñániz, Emma

- Head of the Endocrinology and Nutrition Service at the Navarra Hospital Complex
- Teaching Coordinator for the Endocrinology and Nutrition Service at Navarra Hospital Complex
- Degree in Medicine from the University of Navarra
- PhD in Endocrinology at Hospital de Navarra
- Master's Degree in Health Management from Menéndez Pelayo International University

Dr. Hanzu, Felicia Alexandra

- Senior Specialist in Endocrinology at Barcelona Clinical Hospital
- Associate Professor of Medicine at Barcelona University
- Graduated in Medicine at the University of Medicine and Pharmacy Carol Davila, Bucharest
- Specialist in Endocrinology at the National Institute for Endocrinology CI Parhon, Bucharest
- PhD European International Degree from the Faculty of Medicine, University of Barcelona

Dr. Custodio Carretero, Ana Belén

- Assistant Physician in the Medical Oncology Service, La Paz University Hospital
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Official Doctoral Program in Internal Medicine from the Complutense University of Madrid
- Diploma in Advanced Studies in Medicine from the Complutense University of Madrid

Dr. Araujo Castro, Marta

- Medical Specialist in Endocrinology and Nutrition at Ramón y Cajal University Hospital
- Degree in Medicine and Surgery from the University of Santiago de Compostela
- Master's Degree in Health Care Unit Clinical Management from Universidad Internacional Menéndez Pelayo
- Master's Degree in Research Methodology in Health Sciences, Applied Statistics Laboratory, Autonomous University of Barcelona
- Diploma in Diabetes Mellitus Type 2 Treatment Future Expert Diplomas in Diabetes, Autonomous University of Barcelona

Dr. Lamas Oliveira, Cristina

- Medical Specialist in the Endocrinology and Nutrition Service at Albacete University Hospital Complex
- Coordinator of the Neuroendocrinology Area, Spanish Society of Endocrinology Nutrition (SEEN)
- Secretary of the Castilian-Manchegan Society of Endocrinology, Nutrition and Diabetes
- Degree in Medicine and Surgery from the Autonomous University of Madrid
- Specialist in Endocrinology and Nutrition, Puerta de Hierro Hospital
- PhD in Medicine and Surgery with extraordinary doctoral award for the thesis "Cushing's Disease: Results of surgical treatment and analysis of prognostic factors of cure and recurrence in long-term monitoring"

Dr. Díaz Pérez, José Ángel

- Medical Specialist in Endocrinology and Nutrition at San Carlos Clinical Hospital
- Vice President of the Spanish Group of Neuroendocrine and Endocrine Tumors (GETNE)
- Member of the Tumor Committee at San Carlos Clinical Hospital
- Degree in Medicine and Surgery from the University of Santiago de Compostela
- PhD in Internal Medicine from the Complutense University of Madrid
- Master's Degree in Clinical Management

Dr. Ayuela García, Susana

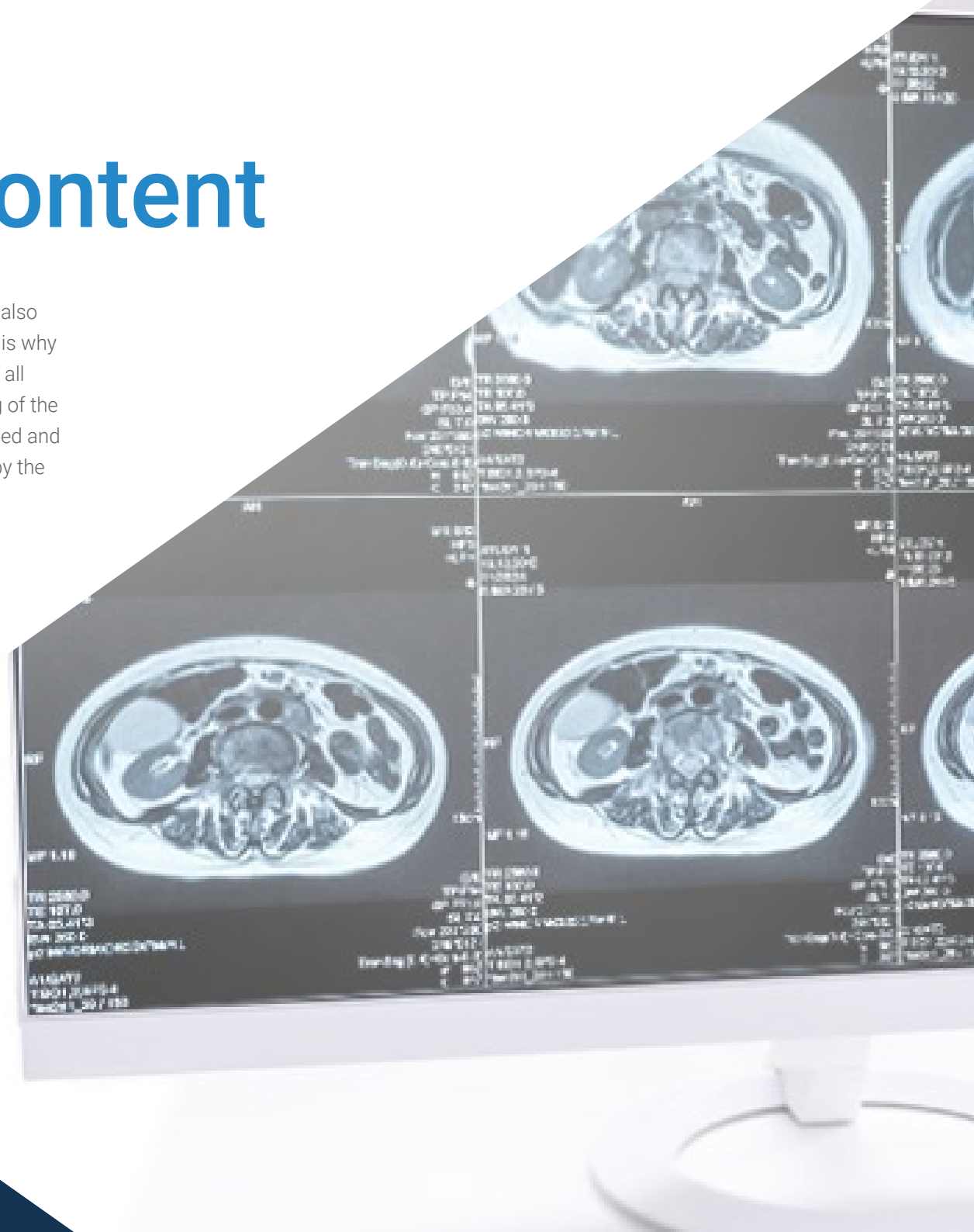
- Medical Specialist in General and Digestive System Surgery at La Paz University Hospital
- Assistant Physician in the General Surgery, Coloproctology Unit, La Paz University Hospital
- Head of Patient Safety, General Surgery Department, La Paz University Hospital
- Member of the Multidisciplinary Committee of Neuroendocrine Tumors, La Paz University Hospital
- Degree in Medicine and Surgery from the Autonomous University of Madrid
- Master's Degree in Bodily Injury Assessment at the Complutense University of Madrid

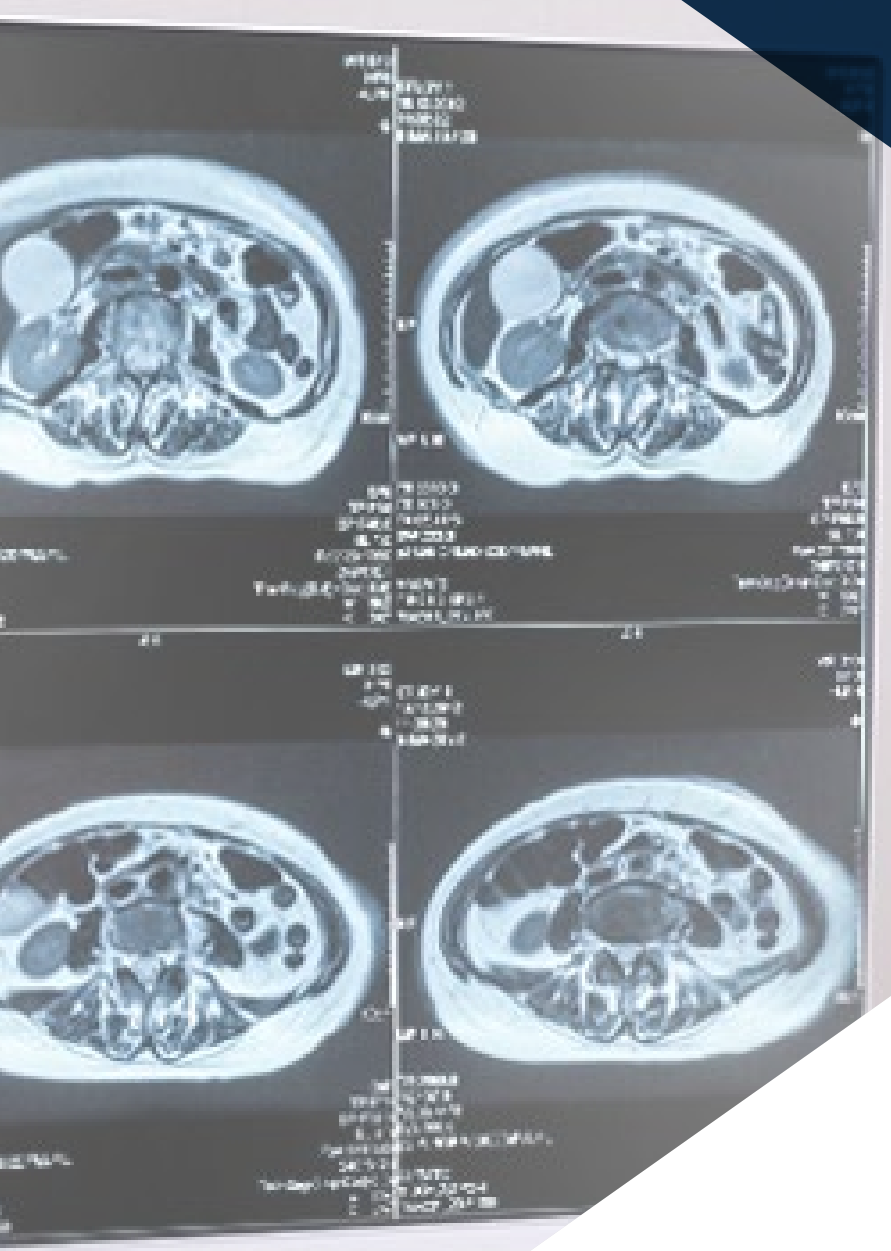
Take the step to get up to date on the latest developments in Patología Oncológica Endocrina"

05

Structure and Content

Endocrine Oncology is a complex subject to deal with, where physicians must also assume the role of patient counselors and intermediaries with the family That is why the content of this Master's Degree goes beyond to include total monitoring of all possible types of Tumor Pathologies, so students have a global understanding of the entire process that affects the patient. Furthermore, the teaching load is reduced and contextualized thanks to the support of quality audiovisual material provided by the professors themselves.





Forget the obsolete programs that demand too much from you and obtain your Master's Degree in Endocrine Oncologic Pathology directly, without a final work paper or project"

Module 1. Hypothalamic-Pituitary Tumor Pathology

1.1. Pituitary Tumors Pathogenesis
1.2. Clinical and Prognostic Classification for Selar Tumors: List Clinical, Radiological, Functional and Anatomical Pathological Elements to Characterize the Prognosis of Selar Lesions
  1.2.1. Adenomas
    1.2.1.1. Clinical, Functional and Radiological Classification
    1.2.1.2. Pathological Anatomy of Pituitary Adenomas
  1.2.2. Non-Adenomatous Selar Tumors: Rathke's Pouch (Cysts, Craniopharyngiomas), Meningiomas
  1.2.3. Non-Proliferative Lesions: Inflammatory, Hemorrhagic
1.3. Imaging Study for Hypothalamic-Pituitary Tumor Pathology
1.4. Ophthalmologic Evaluation for Hypothalamic-Pituitary Tumor Pathology
1.5. Prolactinoma: Differential Diagnosis for Hyperprolactinemia
1.6. Acromegaly
1.7. ACTH-Dependent Cushing's Syndrome: Cushing's Disease
1.8. Non-Functioning Pituitary Adenomas and Gonadotropinomas
1.9. Less Common Pituitary Adenomas
  1.9.1. Thyrotropinomas: Adenomas Plurihormonales
  1.9.2. Aggressive Pituitary Adenomas
1.10. Other Selar Area Tumors
  1.10.1. Rathke's Pouch Cyst and Craniopharyngioma
  1.10.2. Meningioma: Pituicytoma
1.11. Surgical Treatment for Selar and Parasellar Lesions
  1.11.1. Surgical Treatment
  1.11.2. Postoperative Hypothalamic-Pituitary Functional Evaluation
1.12. Radiotherapy and Radionuclide Therapy for Selar and Parasellar Lesions
  1.12.1. Radiotherapy
  1.12.2. Radionuclide Therapy
  1.12.3. Long-term Monitoring after Radiotherapy
1.13. Importance of Tumor Committees and Patient Associations
  1.13.1. Multidisciplinary Approach
  1.13.2. Role of Patient: Association of Patients Affected by Acromegaly

Module 2. Thyroid Nodule Management: Parathyroid Tumors

2.1. Causes of Nodular Thyroid Disease: Thyroid Incidentaloma
2.2. Nodular Thyroid Disease Evaluation: Data Suggesting Malignancy Suspicion
  2.2.1. Clinical Data, Personal History, Family History
  2.2.2. Exploration Data: Laboratory Data
2.3. Ultrasound in the Evaluation of Nodular Thyroid Disease
  2.3.1. Cervical Ultrasound
  2.3.2. TI-RADS Classification: American Thyroid Association (ATA) Classification
2.4. Thyroid Gammagraphy: Other Imaging Techniques
2.5. Nodular Thyroid Disease Cytological Studies
  2.5.1. Fine Needle Aspiration Puncture (FNA) with Ultrasound Monitoring
  2.5.2. Bethesda's Classification
2.6. Hyperthyroidism Caused by Hyperfunctioning Thyroid Nodule: Hyperfunctioning Multinodular Goiter Treatment
2.7. Molecular Markers Use: What to Do with a Bethesda III?
2.8. Nodular Thyroid Disease Surgical Treatment
  2.8.1. Indications
  2.8.2. Types of Treatment
2.9. Other Treatments
  2.9.1. Ethanolization
  2.9.2. Laser Thermal Ablation
  2.9.3. Radiofrequency Thermal Ablation
2.10. Approach to Primary Hyperparathyroidism
  2.10.1. Classification
  2.10.2. Biochemical Diagnosis
  2.10.3. Imaging Tests
  2.10.4. Treatment

Module 3. Differentiated Thyroid Carcinoma (DTC)

3.1. Molecular Aspects of Differentiated Thyroid Carcinoma: Clinical Implications
3.2. Pathological Anatomy of Thyroid Carcinoma: Classification
3.3. Follicular Neoplasm with Papillary-Like Changes (FANFIC)
3.4. Papillary Microcarcinoma
  3.4.1. Is Only Monitoring Possible?
  3.4.2. When to Treat
  3.4.3. How to Treat
3.5. Initial Staging: 8th Classification Differences with the 7th Classification
3.6. Surgical Treatment
  3.6.1. Initial Surgical Treatment
  3.6.2. Relapse Treatment
3.7. Radioiodine Treatment
  3.7.1. When to Treat
  3.7.2. Treatment Dose
  3.7.3. Radioiodine Refractoriness
3.8. Monitoring: Dynamic Risk Staging
3.9. Treatment of Advanced Unresectable DTC
3.10. Importance of Tumor Committees and Patient Associations
  3.10.1. Multidisciplinary Approach

Module 4. Medullary Thyroid Carcinoma (MTC): Other Thyroid Carcinomas

4.1. Medullary Thyroid Carcinoma (MTC)
  4.1.1. Introduction: Epidemiology
  4.1.2. Classification: Anatomopathological Features
  4.1.3. Clinical Manifestations
  4.1.4. Genetic Studies
4.2. MTC: Initial Staging Dynamic Risk Staging
4.3. Diagnosis of CMT
  4.3.1. Laboratory Tests
  4.3.2. Imaging Tests
  4.3.3. FNA with Ultrasound Monitoring
4.4. MTC: Surgical Treatment
  4.4.1. Surgical Scope
  4.4.2. Surgical Treatment for Relapse
  4.4.3. Surgical Treatment for Metastasis
4.5. MTC: Radiotherapy: Radionuclide Therapy
4.6. MTC: Advanced Unresectable Disease Treatment
  4.6.1. Tyrosine Kinase Inhibitors
  4.6.2. Other Treatments
4.7. MTC: Monitoring and Prognosis
4.8. Poorly Differentiated Thyroid Carcinoma: Anaplastic Carcinoma
4.9. Thyroid Lymphoma and Other Rare Thyroid Malignancies: Metastases of Other Tumors

Module 5. Adrenal Cortex Tumors

5.1. Adrenal Incidentaloma: Diagnostic Approach
5.2. ACTH Independent Cushing's Syndrome Caused by Adrenal Adenoma
5.3. Primary Hyperaldosteronism: Cohn's Disease
5.4. Adrenocortical Carcinoma (ACC)
  5.4.1. Introduction
  5.4.2. Medical History and Exploration
5.5. ACC: Genetic Aspects Laboratory Data Hormone Secretion
5.6. ACC: Imaging Tests Ultrasound CT, MRI, PET-CT
5.7. ACC: Pathological Anatomy Staging Prognostic Factors
5.8. Surgical Treatment
  5.8.1. Surgical Treatment for Primary Tumors
  5.8.2. Surgery and Other Local Treatments for Advanced Disease
5.9. Adjuvant: Radiotherapy Relapse Treatment
5.10. Treating Advanced Stages of the Disease

Module 6. Pheochromocytomas and Paragangliomas

6.1. Introduction
- 6.1.1. Anatomy Recap
- 6.1.2. Epidemiology

6.2. Molecular Basis: Genotype-Phenotype Correlation
6.3. Clinical Manifestations: Ways It Presents Itself
6.4. Laboratory Data
6.5. Imaging Tests
6.6. Surgical Treatment
- 6.6.1. Adrenergic Block
- 6.6.2. Surgery for Pheochromocytomas and Paragangliomas: Embolization

6.7. Radionuclide Therapy: Radiotherapy
6.8. Treating Advanced Stages of the Disease
6.9. Prognosis and Monitoring
- 6.9.1. Different Mutation Carrier Monitoring
- 6.9.2. Long-Term Monitoring
- 6.9.3. Prognosis

6.10. Importance of Tumor Committees and Patient Associations
- 6.10.1. Multidisciplinary Approach
- 6.10.2. Role of Patient Associations

Module 7. Multiple Endocrine Neoplasia Syndromes

7.1. Multiple Endocrine Neoplasia Type I (MEN I): Genetics
- 7.1.1. MEN I Genetics
- 7.1.2. When to Perform a Genetic Study to Rule Out Mutation in the Menin Gene
- 7.1.3. Genetic Counseling for MEN I: Preimplantational Diagnosis

7.2. Clinical Manifestations of the Syndrome: Ways MEN I Presents Itself
7.3. Laboratory Tests at Initial Evaluation and Subsequent Monitoring
7.4. MEN I. Imaging Tests at Initial Evaluation and Subsequent Monitoring
7.5. MEN I. Primary Hyperparathyroidism (PHPT) Treatment: Relapse Management
7.6. MEN I. Pancreatic Neuroendocrine Tumors: Surgical Indications
7.7. Managing of Other Tumors
- 7.7.1. Neuroendocrine Tumors (NETs) in Atypical Locations: Bronchial and Thymic NETs
- 7.7.2. Screening, Monitoring and Treatment for Other Neoplasms

7.8. Multiple Endocrine Neoplasm Type II (MEN II): MEN II Genetics
- 7.8.1. RET Oncogene
- 7.8.2. Genotype-Phenotype Correlation
- 7.8.3. Less Common Mutations

7.9. MEN II: Medullary Carcinoma
- 7.9.1. Evaluation and Monitoring after Knowing the Carrier's Condition
- 7.9.2. Prophylactic Thyroidectomy

7.10. MEN II: Primary Pheochromocytoma and Hyperparathyroidism
- 7.10.1. Evaluation and Monitoring after Knowing the Carrier's Condition
- 7.10.2. Indications for Hyperparathyroidism Treatment in MEN II Patients

7.11. MEN II: Other MEN II Manifestations
7.12. Others Multiple Endocrine Neoplasm Syndromes

Module 8. Gastroenteropancreatic Neuroendocrine Tumors (GEP-NETs)

8.1. Gastroenteropancreatic Neuroendocrine Tumors
- 8.1.1. Concept
- 8.1.2. Epidemiology

8.2. Molecular and Cellular Basis
8.3. Pathological Anatomy
- 8.3.1. Classification Systems

8.4. Lung and Thymus NETs
8.5. Gastric NETs
8.6. Intestinal NETs: Appendix NET
8.7. Non-Functioning Pancreatic NETs
8.8. Gastrinoma
8.9. Insulinoma
8.10. Gucagonoma, Somatostatinoma, Vipoma: Other Functioning Tumors

Module 9. GEP-NET: Anatomical and Functional Diagnosis Treating Locoregional Disease

9.1. Carcinoid Syndrome: Carcinoid Cardiopathy
9.2. ACTH and Other Hormone Ectopic Secretion Syndromes
9.3. GEP-NET Diagnosis and Monitoring: Biological Markers
  9.3.1. Usefulness in Diagnosis and Monitoring
9.4. GEP-NET Diagnosis and Monitoring: Endoscopy and Echoendoscopy-Guided Fine Needle Aspiration Puncture (FNA) in the Diagnosis and Monitoring of GEP-NET
9.5. GEP-NET Diagnosis and Monitoring: Imaging Tests I
  9.5.1. Ultrasound, Computerized Tomography, Magnetic Resonance Imaging
  9.5.2. Treatment Response Criteria (RECIST, Choi, and Others)
9.6. GEP-NET Diagnosis and Monitoring: Imaging Tests II Nuclear Medicine in the Diagnosis and Monitoring of GEP-NETs
9.7. Surgical Treatment for Pulmonary NET
9.8. Surgical Treatment for Gastric NET
9.9. Surgical Treatment for Intestinal NET
9.10. Surgical Treatment for Pancreatic NET
  9.10.1. Treatment for Incidentally Discovered Non-Functioning Pancreatic NETs: Surgery / Monitoring
9.11. Surgical Treatment for G3 Tumors: Surgical Treatment for MINEN

Module 10. Gastroenteropancreatic Neuroendocrine Tumors: Treating Advanced Stages of the Disease

10.1. Surgical Treatment in Advanced Stages of the Disease
  10.1.1. Surgical Treatment Indication for Primary Tumors
  10.1.2. Surgical Treatment for Liver and Other Metastases
10.2. Locoregional Treatments
  10.2.1. Embolization
  10.2.2. Radiofrequency
  10.2.3. Other Locoregional Treatments
10.3. Biological Treatments: Somatostatin Analogues and Others
10.4. Chemotherapy and Targeted Therapies: Role of Immunotherapy
10.5. Theragnosis: Radionuclide Therapy
10.6. Treatment Sequencing
10.7. Nutritional Management for GEP-NET Patients
10.8. Importance of Tumor Committees and Patient Associations
  10.8.1. Multidisciplinary Approach

This is the future of education, where you are the one who decides when, where and how to study all the didactic content"

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:

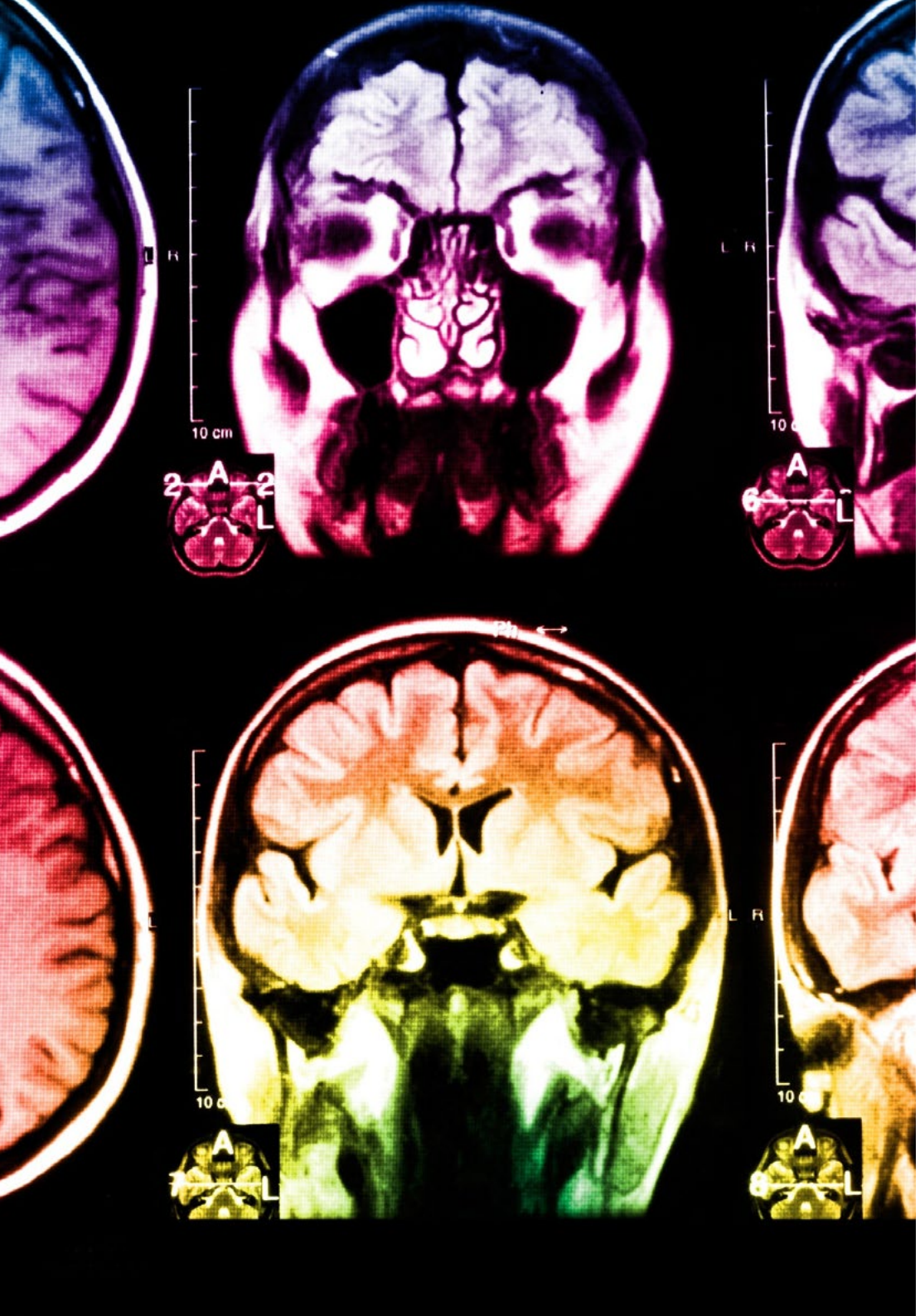
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better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

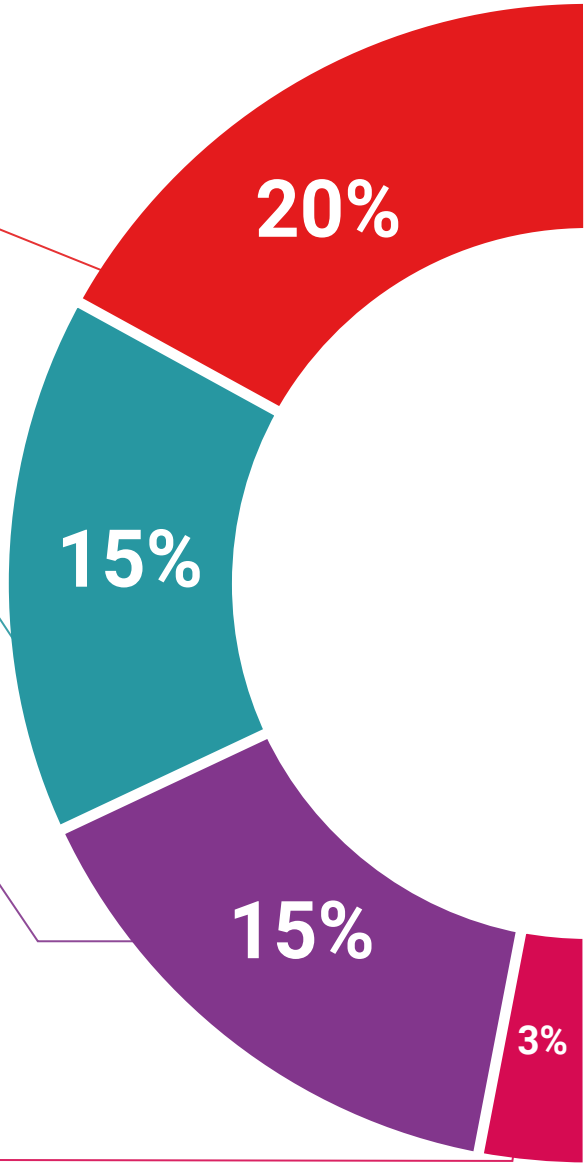
Interactive Summaries

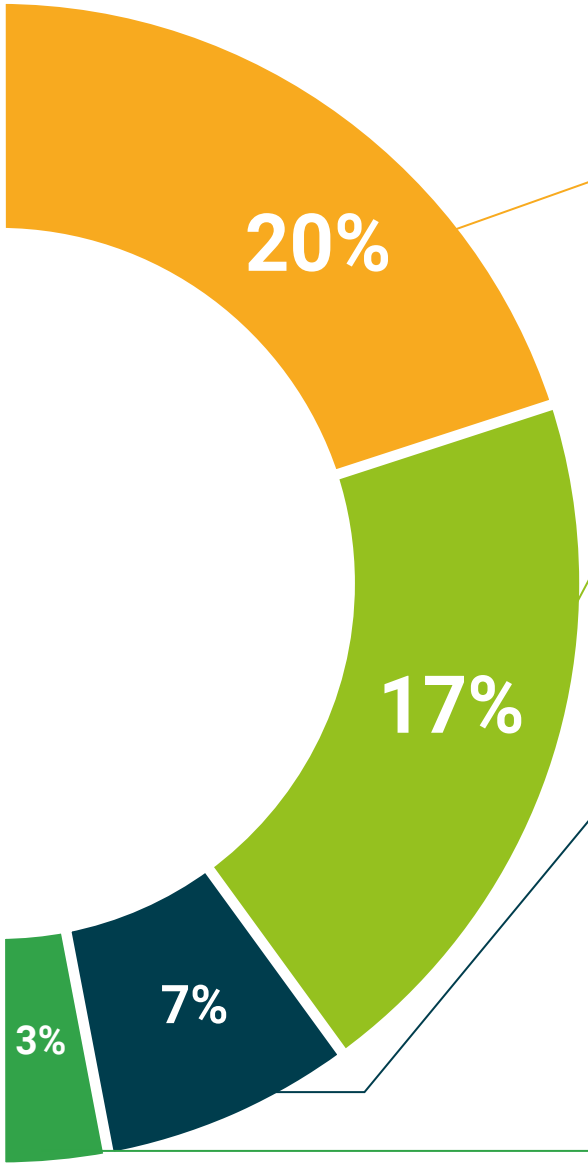
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.

07

Certificate

The Master's Degree in Endocrine Oncologic Pathology guarantees, in addition to the most rigorous and up-to-date training, access to a qualification issued by TECH Global University.

Successfully complete this training program and receive your diploma without travel or laborious paperwork"

This program will allow you to obtain your **Master's Degree diploma in Endocrine Oncologic Pathology** 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: **Master's Degree in Endocrine Oncologic Pathology**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**


tech global university

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

Master's Degree in Endocrine Oncologic Pathology

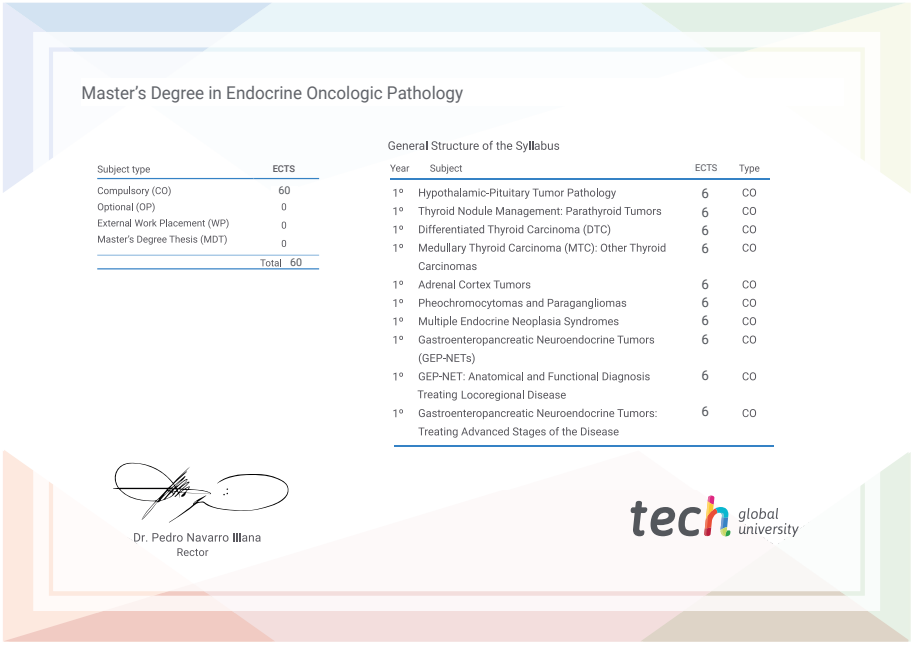
This is a program of 1,500 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

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


Master's Degree in Endocrine Oncologic Pathology

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
Total	60

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Hypothalamic-Pituitary Tumor Pathology	6	CO
1º	Thyroid Nodule Management: Parathyroid Tumors	6	CO
1º	Differentiated Thyroid Carcinoma (DTC)	6	CO
1º	Medullary Thyroid Carcinoma (MTC): Other Thyroid Carcinomas	6	CO
1º	Adrenal Cortex Tumors	6	CO
1º	Pheochromocytomas and Paragangliomas	6	CO
1º	Multiple Endocrine Neoplasia Syndromes	6	CO
1º	Gastroenteropancreatic Neuroendocrine Tumors (GEP-NETs)	6	CO
1º	GEP-NET: Anatomical and Functional Diagnosis Treating Locoregional Disease	6	CO
1º	Gastroenteropancreatic Neuroendocrine Tumors: Treating Advanced Stages of the Disease	6	CO

Dr. Pedro Navarro Illana
Rector

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

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Master's Degree

Endocrine Oncologic Pathology

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Global University**
- Credits: **60 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Master's Degree

Endocrine Oncologic Pathology

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