

# Advanced Master's Degree Integrative Gynecologic Oncology





## Advanced Master's Degree Integrative Gynecologic Oncology

- » Modality: online
- » Duration: 2 years
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/medicine/advanced-master-degree/advanced-master-degree-integrative-gynecologic-oncology](http://www.techtitute.com/us/medicine/advanced-master-degree/advanced-master-degree-integrative-gynecologic-oncology)

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# 01

# Introduction

Gynecologic cancer is a global women's health challenge, and it is essential that medical specialists keep up to date with advances in gynecologic oncology. In view of this situation, TECH has created the present program, which offers an option for updating in this field. The syllabus includes the biological basis of cancer, chemotherapy treatment, adverse effects and new therapies, as well as other topics of great interest. The advantage of the program is its comprehensive approach that addresses clinical, surgical, radiotherapeutic, oncological and quality of life aspects, in a 100% online format that allows for flexibility in combining the program with the participants' personal and professional lives.



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*Discover the latest updates in gynecologic cancer biology and treatment with this Advanced Master's Degree in Integrative Gynecologic Oncology”*

Today, gynecologic cancer represents a significant challenge to women's health worldwide. With the constant evolution in the understanding of the biology and pathology of these tumors, as well as diagnostic and treatment strategies, it is essential for medical specialists to be up-to-date on the latest advances in gynecologic oncology. The complexity and multidisciplinary nature of the care of these patients requires a comprehensive approach that addresses not only clinical aspects, but also psychosocial, ethical and quality of life aspects.

Against this backdrop, TECH has created this Advanced Master's Degree in Integrative Gynecologic Oncology. This is an update option for all specialists interested in deepening their knowledge in this field. The program syllabus includes a solid knowledge base in the biological basis of cancer, as well as in chemotherapy treatment, adverse effects and new therapies. The specific management of different types of gynecological cancers, such as endometrial, cervical, ovarian and vulvar cancer, as well as uterine sarcomas, is discussed in depth.

The program has a team of highly trained teachers with extensive experience in the management of gynecological cancer, which guarantees quality and updated teaching. Furthermore, an educational methodology based on active and participatory teaching is used, with the use of clinical cases, group discussions and practical activities that allow participants to apply the knowledge acquired in real clinical situations.

A significant advantage of the program is its comprehensive approach, which encompasses clinical, surgical, radiotherapeutic, oncologic and quality-of-life aspects of gynecologic cancer management. Participants will gain a holistic view of the disease and its approach, in a 100% online format that gives them the flexibility to combine it with their personal and professional lives.

This **Advanced Master's Degree in Integrative Gynecologic Oncology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Practical case studies are presented by experts in and Oncology and Gynecology
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ A special emphasis on innovative methodologies in the Gynecological Oncology
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*You will have a highly qualified teaching team with extensive experience in the management of gynecological cancer, guaranteeing quality and updated teaching"*

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*You will cover not only the clinical, but also the psychosocial, ethical and quality of life aspects of gynecologic cancer management, providing you with a holistic view of the disease”*

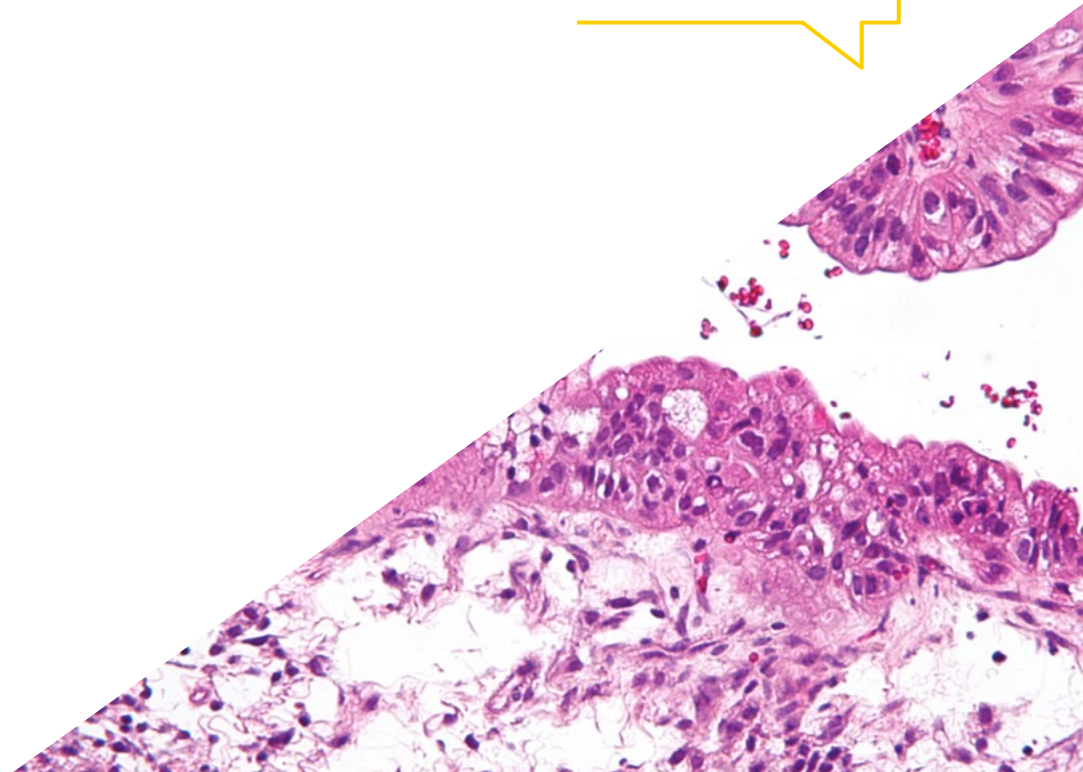
Its teaching staff includes professionals from the field of education, who bring to this program the experience of their work, as well as recognized specialists from reference societies and prestigious universities.

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 learning experience designed to prepare for real-life situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will have clinical cases and practical activities that will allow you to apply the knowledge acquired in real clinical situations.*

*With a 100% online format, you can study at your own pace and combine it with your personal and professional life, without compromising your daily responsibilities.*



# 02 Objectives

The Advanced Master's Degree in Comprehensive Gynecologic Oncology has as its main objective to update and broaden the knowledge of specialists in the field of gynecologic oncology, providing them with the necessary tools to approach this complex disease in a comprehensive and multidisciplinary manner. Therefore, all the guidelines and content of the and content of the program are based on the latest scientific evidence, supported by the most rigorous postulates in the field.







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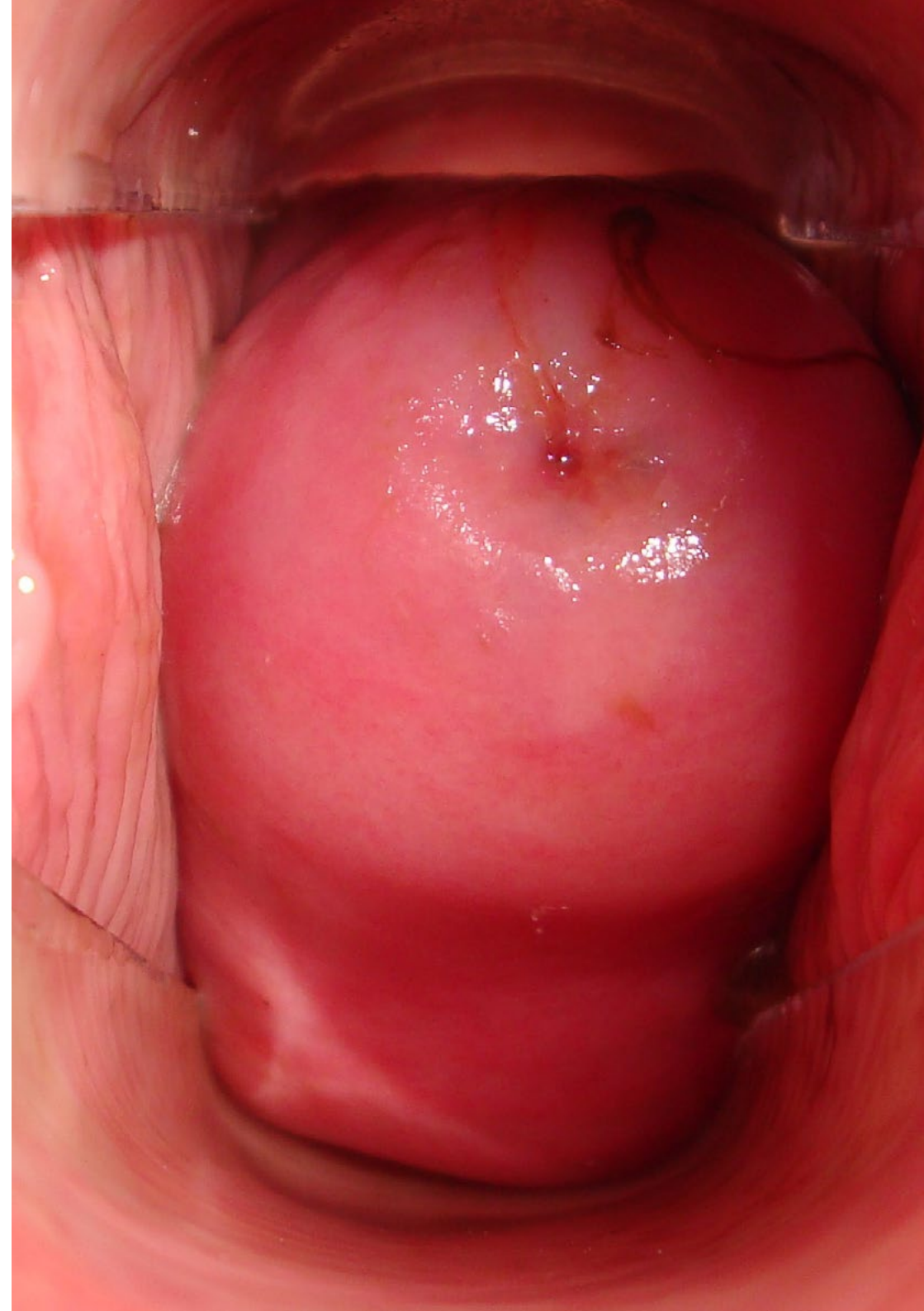
*Delve into the latest developments in gynecologic cancer biology and treatment to stay abreast of best clinical practices”*



## General Objectives

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- ♦ Gain up-to-date, specialist knowledge of the procedures and techniques performed in gynecologic oncology, incorporating the latest advances in the discipline in order to increase the quality of daily medical practice
- ♦ Know all the concepts of embryology, anatomy, physiology and genetics applicable to the breast
- ♦ Know the natural history of breast cancer and its biological aspects
- ♦ Learn about early diagnostic techniques in breast diseases
- ♦ Know all the multidisciplinary teams and platforms related to mastology
- ♦ Know the different histological types of benign and malignant breast tumors
- ♦ Gain knowledge of how to deal with special situations in breast cancer
- ♦ Establish a series of alternatives for the management of benign breast pathology
- ♦ Gain knowledge of the surgical treatment of breast cancer
- ♦ Learn preoperative and postoperative care for breast pathology
- ♦ Apply prophylactic medical treatment of breast cancer
- ♦ Learn to deal with chemotherapy treatments in mammary carcinoma
- ♦ Know the different alternative immunotherapies and support therapies
- ♦ Apply different appropriate molecular techniques in each specific clinical case
- ♦ Provide tools to deal with situations of poor response and recurrence
- ♦ Learn how to deal with metastatic breast cancer
- ♦ Understand the aspects related to research and clinical trials in breast pathology
- ♦ Get to know the associations and support groups for patients





## Specific Objectives

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### Module 1. Biological Basis of Cancer

- ◆ Recognize and understand the molecular bases of carcinogenesis as well as its development and metastasis production
- ◆ Define the basis of cellular growth regulation
- ◆ Understand the role of carcinogens in the formation of genital cancer
- ◆ Gain up-to-date knowledge of cancer genetics
- ◆ Understand the cellular mechanisms of programmed cell death and apoptosis and their relationship and activity with malignant pathology
- ◆ Interpret the mechanisms of cancer production and distant metastasis at a molecular level
- ◆ Identify the origins of genetic alterations that provoke cancer
- ◆ Identify the epigenetic changes and oncogenes related with genital tract tumor pathology
- ◆ Explain the mechanisms tumor neof ormation in blood vessels
- ◆ Recognize respiratory symptomatology, such as that caused by pleural effusion, in the treatment of gynecologic cancer

### Module 2. Basis of Chemotherapy Treatment, Adverse Affects and New Therapies

- ◆ Identify the essentials for the use of chemotherapy in gynecologic oncology as well as adverse effects and complications
- ◆ Identify the basic factors that are involved in chemotherapy treatment
- ◆ Highlight the influence of chemotherapy in the cellular cycle
- ◆ Identify the action mechanisms of antineoplastic agents
- ◆ Recognize the mechanisms for the resistance of medical treatments in gynecologic cancer
- ◆ Gain up-to-date knowledge of toxicity and side effects
- ◆ Review the available antineoplastic drugs and their characteristics

- ◆ Identify cases in which patient observation can be used without using adjuvant treatment
- ◆ Understand the role of new tests such as positron emission tomography for cervical cancer
- ◆ Evaluate the role of tumor markers such as SCC
- ◆ Acquire up-to-date knowledge of the role of laparoscopy in performing a radical hysterectomy and the para-aortic lymphadenectomy for non-early tumor stages
- ◆ Evaluate the use of medical and surgical therapy in metastatic, recurrent or persistent illness
- ◆ Study and analyze the postoperative care of patients to identify any complications early on
- ◆ Appropriately assess the role of chemotherapy in gestational trophoblastic disease
- ◆ Manage the progression of pelvic tumor disease in the most effective way
- ◆ Know the diagnostic methodology of occupational respiratory disease: specific bronchial provocations, provocation chamber, etc
- ◆ Know the main high and low molecular weight occupational agents
- ◆ Differential diagnosis between the different occupational respiratory pathologies: Rhinitis, asthma, eosinophilic bronchitis, pneumonitis, etc

### Module 3. Endometrial Cancer I

- ◆ Identify the different types of endometrial cancer and perform the appropriate diagnostic and disease extension methods
- ◆ Gain up-to-date knowledge on the epidemiology etiopathogenesis of endometrial cancer
- ◆ Evaluate patients with a family history of hereditary carcinomas such as Lynch Syndrome
- ◆ Understand the diagnostic process for endometrial cancer
- ◆ Implement new molecular diagnostic tests for premalignant and malignant endometrial pathology

- ♦ Understand and implement surgical treatments in an appropriate way in the treatment of endometrial cancer
- ♦ Establish the different uses of the surgical approach both by laparotomy and laparoscopy in endometrial cancer, and update knowledge on the application of robotic surgery in endometrial cancer
- ♦ Review adjuvant therapeutic options after primary treatment of endometrial cancer
- ♦ Analyze the role of radiotherapy and adjuvant chemotherapy in endometrial cancer
- ♦ Understand the applications of hormonal treatment in endometrial cancer

#### **Module 4. Endometrial Cancer II**

- ♦ Evaluate the distinct types of patients with endometrial cancer in order to implement the most appropriate treatment in each individual case
- ♦ Recognize precancerous endometrial lesions and apply the most appropriate treatment
- ♦ List the different histological types of endometrial cancer and the different tumor types
- ♦ Recognize and interpret the different imaging tests needed for the diagnosis and staging of endometrial cancer
- ♦ Interpret the distinct tumor markers and their use in the possible screening of endometrial cancer
- ♦ Classify endometrial pathology by FIGO prognostic classification
- ♦ Classify the different high and low-risk endometrial tumors
- ♦ Study the new surgical techniques for treating high risk endometrial cancer
- ♦ Gain up-to-date knowledge on the treatment of some specific endometrial tumors such as the clear cell and serous papillary types
- ♦ Review how to deal with recurring endometrial cancer including surgery, radiotherapy and / or chemotherapy as well as evidence on the follow-up treatment and prognosis of endometrial tumors

#### **Module 5. Cervical Cancer I**

- ♦ Identify pre-invasive pathologies of the cervix and correctly apply early diagnosis methods
- ♦ Laparoscopic removal of pelvic sentinel lymph node
- ♦ Determine the etiology and etiopathogenesis of cervical cancer and its stages of development
- ♦ Gain up-to-date knowledge of the distant imaging techniques for diagnosing cervical cancer such as magnetic resonance and scanning
- ♦ Acquire up-to-date knowledge of the treatment for preinvasive cervical lesions including surgery and immunotherapy
- ♦ Identify the role of the sentinel node in cervical cancer and the pelvic sentinel node labeled with indocyanine green
- ♦ Gain up-to-date knowledge of the use of concurrent and neoadjuvant chemotherapy in cervical cancer
- ♦ Compare the characteristics of squamous cell carcinoma and cervical adenocarcinoma

#### **Module 6. Cervical Cancer II**

- ♦ Classify and treat cervical cancers in the most appropriate way
- ♦ Know the risk factors for contracting the human papillomavirus
- ♦ Review the application of techniques for early diagnosis of cervical cancer and hereditary-familial diseases affecting the cervix
- ♦ Evaluate the role of FIGO and TNM classification in cervical cancer and its prognostic role
- ♦ Revise the different invasive surgical techniques for cervical cancer, especially the different types of radical hysterectomy with or without nerve preservation
- ♦ Identify the indications of chemotherapy and radiotherapy in cervical cancer
- ♦ Gain up-to-date knowledge of the invasive cervical adenocarcinoma and adenocarcinoma in situ

**Module 7. Ovarian Cancer I**

- ♦ Identify patients at risk of ovarian cancer and perform a precise preoperative diagnosis
- ♦ Review the epidemiology and etiopathogenesis of ovarian and fallopian tube cancer
- ♦ Review the possibilities of screening by ultrasound and the tumor markers for the early detection of ovarian cancer
- ♦ Establish the new criteria for pathological and molecular classification of ovarian cancer
- ♦ Evaluate the different clinical manifestations, highlighting the value of ultrasound, magnetic resonance imaging and scanning in the diagnosis of ovarian cancer
- ♦ Analyze the role of tumor serological markers CA125, CA19.9, CEA, HE4 and other rare tumor serological markers in ovarian cancer
- ♦ Specifically analyze the role of complete cytoreduction and its prognostic implications
- ♦ Analyze the role of interval surgery in ovarian cancer and establish the most appropriate adjuvant chemotherapy steps and biological treatments for each case
- ♦ Identify the possibilities available for the follow-up of patients with ovarian cancer
- ♦ Analyze the controversies on the management of ovarian and fallopian tube cancer

**Module 8. Ovarian Cancer II**

- ♦ Apply the most appropriate surgical or chemotherapy treatment for each case of ovarian cancer
- ♦ To evaluate STIC tubal lesions as precursors of ovarian cancer
- ♦ Gain up-to-date knowledge on hereditary-familial ovarian cancer and new predisposing genetic mutations
- ♦ Indicate the distinct pathological types of ovarian and fallopian tube cancer and relate them to the different diagnostic tests for studying the extension and initial diagnosis of each one

- ♦ Classify the different types of ovarian cancer according to the FIGO classification and determine the general approach surgical procedures
- ♦ Evaluate when a patient should preferentially receive neoadjuvant chemotherapy for ovarian cancer
- ♦ Analyze the role of radiotherapy and hormone therapy in endometrial cancer
- ♦ Review and gain up-to-date knowledge on intraperitoneal chemotherapy treatments and hyperthermic therapy in ovarian and peritoneal cancer

**Module 9. Vulvar Cancer I**

- ♦ Identify the premalignant pathology in the vulva and apply the appropriate diagnostic techniques in each case
- ♦ Interpret normal colposcopic and vulvar examination, and interpret abnormal findings on both colposcopic and vulvosopic examination
- ♦ Describe the etiology of vulva cancer and its relationship to recurrent HPV infection
- ♦ Assess the role of possible vulvar cancer screening and hereditary risk factors in pathological alterations
- ♦ Describe the different histological types of vulvar cancer and the most efficient tests for diagnosis and extension study
- ♦ Review the use of tumor markers in vulvar cancer
- ♦ Review the procedure for addressing a primary vulvar lesion
- ♦ Update on the management of advanced vulvar cancer, both primary tumor and lymph node chains
- ♦ Evaluate how to deal with a recurrent vulva carcinoma
- ♦ Review the follow-up care of vulvar cancer patients for early detection of recurrences
- ♦ Study the characteristics and treatment of tumors of the Bartholin's glands and basal cell carcinomas of the vulva

### Module 10. Vulvar Cancer II

- ◆ Identify the premalignant pathology in the vulva and apply the appropriate diagnostic techniques in each case
- ◆ Interpret normal colposcopic and vulvar examination, and interpret abnormal findings on both colposcopic and vulvoscopy examination
- ◆ Describe the etiology of vulva cancer and its relationship to recurrent HPV infection
- ◆ Assess the role of possible vulvar cancer screening and hereditary risk factors in pathological alterations
- ◆ Describe the different histological types of vulvar cancer and the most efficient tests for diagnosis and extension study
- ◆ Review the use of tumor markers in vulvar cancer
- ◆ Review the procedure for addressing a primary vulvar lesion
- ◆ Update on the management of advanced vulvar cancer, both primary tumor and lymph node chains
- ◆ Evaluate how to deal with a recurrent vulva carcinoma
- ◆ Review the follow-up care of vulvar cancer patients for early detection of recurrences
- ◆ Study the characteristics and treatment of tumors of the Bartholin's glands and basal cell carcinomas of the vulva

### Module 11. Uterine Sarcoma I

- ◆ Identify and classify the different anatomopathological forms of uterine sarcoma
- ◆ Appropriately manage early and advanced stage sarcomatous pathology of the uterus and adequate assessment of its prognosis
- ◆ Revise the epidemiology of a uterine sarcoma
- ◆ Acquire up-to-date knowledge of the anatomopathologic characteristics of the different histologic types of uterine sarcoma





- ◆ Evaluate the role of tumor markers in sarcoma of the uterus
- ◆ Review the indications and surgical techniques, as well as radiotherapy and chemotherapy, for the treatment of early stage uterine leiomyosarcoma
- ◆ Study the prognostic factors in uterine leiomyosarcoma
- ◆ Review the treatment and management of the early stages of endometrial stromal sarcoma

#### **Module 12. Uterine Sarcoma II**

- ◆ Identify and classify the different anatomopathological forms of uterine sarcoma
- ◆ Identify the risk factors associated with the development of a uterine sarcoma
- ◆ Review the different clinical manifestations of uterine sarcomas and the use of magnetic resonance in the diagnosis procedures
- ◆ Classify the uterine sarcomas according to the international FIGO classification model
- ◆ Gain up-to-date knowledge on the management of recurrent or metastatic disease in uterine leiomyosarcoma
- ◆ Analyze the management of recurrent endometrial stromal sarcoma
- ◆ Study the treatment of a metastatic disease and the prognostic factors of an endometrial stromal sarcoma
- ◆ Review the treatment and management of the early stages of undifferentiated endometrial sarcoma

### Module 13. Fertility Preservation

- ♦ Determine the different fertility preservation techniques in young patients and their oncological implications
- ♦ Identify the options for preserving fertility in gynecologic cancer, as well as gamete preservation
- ♦ Revise the surgical techniques for preserving fertility in each of the cancers affecting the female genital tract
- ♦ Update on the management of pregnant patients with gynecologic cancer
- ♦ Review new options for preserving ovarian tissue
- ♦ Gain up-to-date knowledge on the current status of uterine transplantation and the most recent results obtained to date

### Module 14. Uncommon Gynecologic Tumors

- ♦ Identify the different types of less common genital tumors and the corresponding treatment and evolution
- ♦ Revise the clinical manifestations and diagnosis of vaginal cancer
- ♦ Review the different histological types and classify the different types of vaginal cancer
- ♦ Evaluate and create an appropriate diagnostic and management plan for vaginal cancer
- ♦ Establish the follow-up plan for vaginal cancer to be able to detect and recurrences
- ♦ Identify the prognosis for each type of vaginal cancer
- ♦ Review the epidemiology of gestational trophoblastic disease and the clinical features of hydatidiform mole
- ♦ Study the clinical characteristic of gestational trophoblastic neoplasia
- ♦ Appropriately evaluate the different forms of gestational trophoblastic disease with imaging techniques

- ♦ Gain up-to-date knowledge of the histologic shapes of molar and invasive forms
- ♦ Appropriately perform staging of placental invasive disease
- ♦ Study the different types of surgical treatment suitable for treating the different forms of molar disease in pregnancy
- ♦ Recognise and implement the most appropriate methods for follow-up treatment of molar disease in pregnancy
- ♦ Appropriately classify the prognosis of gestational trophoblastic disease
- ♦ Identify and assess the different tumors that can metastasize in the female genital tract
- ♦ Study the way to deal with metastasized cancers in the genital tract
- ♦ Analyze and treat neuroendocrine tumors in the female genital tract
- ♦ Review the way to deal with tumors of the rectovaginal septum, as well as symptomatology associated with gynecological tumors
- ♦ Evaluate the pain, the different types and the treatment of these types of tumors
- ♦ Assess the presence of ascites in the context of gynecologic tumors in an appropriate way
- ♦ Classify edema and manage it appropriately
- ♦ Identify deep vein thrombosis and evaluate the most appropriate anticoagulant treatment for each case

### Module 15. Palliative Care and Nutrition

- ♦ Study and understand the basis of palliative care and terminal phase of an oncological illness
- ♦ Evaluate the usefulness of PET-CT for the assessment of metabolism in suspected malignant lesions
- ♦ Gain up-to-date knowledge of gastrointestinal symptomatology



- ♦ Identify the distant metastasis and assess how to manage it
- ♦ Describe the indications and the surgical technique specific to palliative pelvic exenteration
- ♦ Comprehensive care of a dying patient and learning how to help them in the final phase of the disease
- ♦ Study and treat patients with anxiety and depression in a specific way

#### **Module 16. Palliative Care and Nutrition**

- ♦ Interpretation of radiology in breast pathology
- ♦ Properly manage the diagnosis of microcalcifications and distortion of breast architecture
- ♦ Explore pre-treatment clinical staging in breast cancer
- ♦ Learn in detail about the latest advances in diagnostic and interventional breast surgery

#### **Module 17. Pathological Anatomy**

- ♦ Delve into the characteristics of mammary embryology to obtain a broad and exhaustive knowledge of its characteristics
- ♦ Gain knowledge of the molecular types of breast cancer and the subtypes of triple negative breast cancer
- ♦ Know the latest scientific evidence related to the treatment of fibroepithelial and mesenchymal tumors
- ♦ Special emphasis on special clinicopathological situations in which genetic tumor syndromes are present

#### **Module 18. Functional Anatomy**

- ♦ Delve into the key points of vascularization in skin and areola preservation, as well as muscle preservation and local flaps
- ♦ In-depth knowledge of the latest developments in lymphatic drainage
- ♦ Study the radiological anatomy of the breast region and donor sites in reconstructive surgery
- ♦ Obtain a broad and specialized knowledge of the vascular, nervous and ganglionic content of the axillary cavity

#### **Module 19. Embriology, Malformations and Intersexual States**

- ♦ Delve into the embryology and physiology of the breast
- ♦ Have adequate medical knowledge to identify the different types of breast malformations and their characteristics
- ♦ Delve into the specifics of macromastia and micromastia for better clinical management
- ♦ Learn in detail about the latest oncological advances in the treatment of inflammatory breast diseases

#### **Module 20. Locoregional Surgical Treatment in Malignant Breast Pathology**

- ♦ Highlight the basics of breast conserving surgery and the incidence of lumpectomy
- ♦ In-depth understanding of the role of loco regional treatment within a multimodal, patient-based approach
- ♦ Identify the most current drugs in the treatment of malignant breast pathology, focusing on antibiotic and thromboembolic prophylaxis
- ♦ Describe the current modified radical mastectomy, with special emphasis on its indications and alternatives

### Module 21. Plastic and Reconstructive Surgery

- ♦ Be able to implement in the professional practice of the graduate the most innovative strategies and techniques in augmentation, reduction and mastopexy
- ♦ Know the most effective indications, modalities and current techniques in prosthetic reconstruction in detail
- ♦ Obtain a comprehensive and up-to-date knowledge of the possible sequelae of breast-conserving surgery and their treatment
- ♦ Understand the importance of specialized scar management with patients who have undergone plastic and reconstructive surgery

### Module 22. Systemic Therapy in Breast Cancer

- ♦ Update the graduate on cell cycle, oncogenesis and pharmacogenomics in Breast Cancer
- ♦ Perform a detailed approach to chemotherapy and its advances
- ♦ Learn about the latest developments with respect to target therapies and support
- ♦ Delve into the possible complications of breast cancer and their management depending on the affected area





### **Module 23. Radiotherapy**

- ◆ Specify the indications for treatment with radiotherapy in patients with breast cancer
- ◆ Obtain a broad and comprehensive view of radiology and immunotherapy
- ◆ Know the new techniques of partial breast irradiation: IORT, SBRT and External Beam Radiation Therapy
- ◆ Detail the recommendations regarding the patient's lifestyle during radiological treatment

### **Module 24. Precision Oncology and Cancer**

- ◆ Learn about the evolution of precision medicine, especially in its application in breast cancer
- ◆ Delve into targeted therapies based on personalized diagnosis through genetic testing
- ◆ Obtain a broad, specialized and up-to-date knowledge of epigenetics
- ◆ Improve their skills in intervention and management of breast cancer patients according to the most current and innovative therapies in the field of oncology

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*It approaches gynecologic cancer in a comprehensive manner, with a multidisciplinary approach in the management of this pathology”*

# 03 Skills

The Advanced Master's Degree in Comprehensive Gynecologic Oncology provides participants with the opportunity to develop advanced clinical competencies in the diagnosis, treatment and follow-up of different types of gynecologic cancers. Specialists will be able to update and expand their knowledge in the interpretation of imaging tests, the selection of appropriate therapies and the management of adverse effects, among other aspects of rigorous actuality in the specialty.





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*Get a holistic view of the disease and its approach and its approach in an active and participative teaching format, with multiple exercises to put into practice the acquired methodology”*

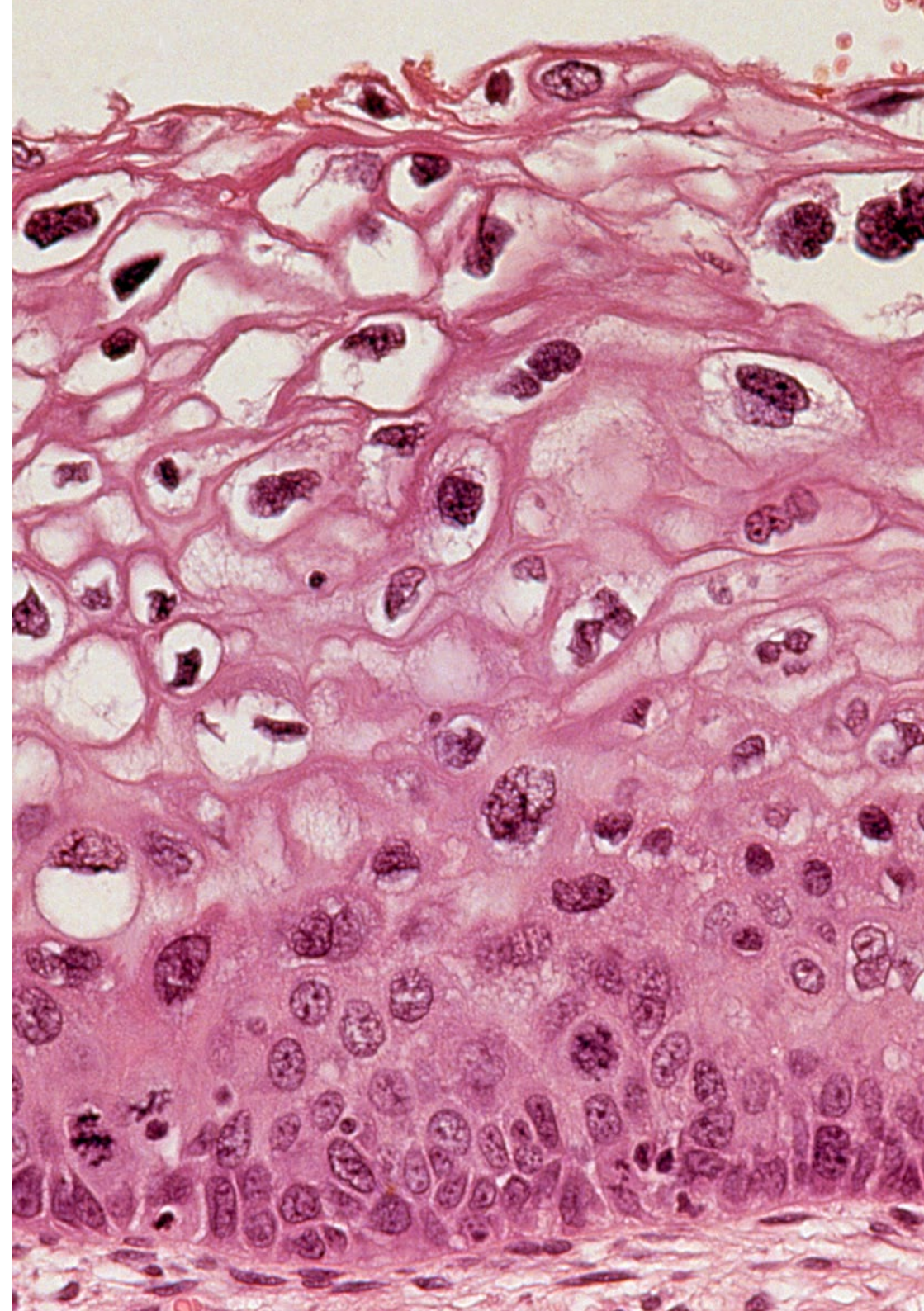


## General Skills

- ◆ Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context
- ◆ Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the field of study
- ◆ Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- ◆ Know how to communicate conclusions, knowledge, and supporting arguments to specialized and non-specialized audiences in a clear and unambiguous way
- ◆ Acquire the learning skills that will enable further studying in a largely self-directed or autonomous manner

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*Develop multidisciplinary collaboration skills with surgeons, radiation therapists and oncologists for a comprehensive approach to the management of gynecologic cancer”*





## Specific Skills

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- ♦ Develop within the profession in terms of working with other health professionals, acquiring skills to work as a team
- ♦ Recognize the need to maintain your professional skills and keep them up to date, with special emphasis on autonomous and continuous learning of new information
- ♦ Develop the capacity for critical analysis and research in your professional field
- ♦ Describe the biological basis of oncology procedures
- ♦ Identify and classify the different types of cancer found in the female reproductive system
- ♦ Determine the epidemiology and principle characteristics of oncology processes in women
- ♦ Establish the diagnostic and treatment procedures for the different types of cancer affecting women based on the latest advances in gynecologic oncology
- ♦ Identify the signs and symptoms specific to uterine sarcoma and the latest diagnostic and therapeutic procedures used to address them
- ♦ Describe the surgical procedures related to the different types of cancers affecting women
- ♦ Know ways in which to adequately preserve the fertility of a woman with cancer
- ♦ Identify new research paths and literature updates on gynecologic oncology
- ♦ Identify the signs and symptoms specific to uncommon tumors in women and highlight the latest diagnostic and therapeutic procedures used to address them
- ♦ Implement the correct form of medical practice to care for a dying patient, in accordance with the latest scientific evidence
- ♦ Highlight the main pathologies associated with eating disorders and the actions aimed at their prevention and treatment
- ♦ Have detailed knowledge of all the aspects related to the breast anatomy, physiology and genetics and its practical application with patients
- ♦ Establish diagnostic test systems for the various breast conditions both in a prophylactic manner and to determine the extent of malignant disease
- ♦ Determine the needs for the creation of and access to the different multidisciplinary units for benign and malignant breast pathology
- ♦ Perform an appropriate assessment and clinical orientation of the breast pathology
- ♦ Have exhaustive knowledge of the different types of benign breast pathology and the correct management and treatment for them
- ♦ Use surgical treatment of benign and malignant breast pathology in a minimally invasive and conventional manner
- ♦ Identify and classify the different types of axillary mammary conditions and implement the appropriate treatment for each of them
- ♦ Identify the situations in which it is necessary to implement breast and/ or axillary radiotherapy
- ♦ Establish the appropriate systemic treatment for each patient along with the correct management of the complications that arise in association with it
- ♦ Describe new target therapies and the management of biologic treatments and immunotherapy in breast cancer
- ♦ Provide appropriate care to patients with early and locally advanced breast cancer
- ♦ Identify the peculiarities of locoregional recurrences and metastatic breast cancer
- ♦ Establish medical practice, according to the latest scientific evidence, in the application of breast cancer clinical trials
- ♦ Highlight the main scientific and patient associations in the field of breast pathology

# 04

# Course Management

The Advanced Master's Degree in Comprehensive Gynecologic Oncology is directed by highly experienced specialists with in-depth expertise in the field of gynecologic oncology. These specialists are recognized experts in the field, with an extensive clinical and academic background, which guarantees a high quality and updated course management. Program participants will benefit from the experience and knowledge of these outstanding professors, who will provide a rigorous and specialized update on the comprehensive management of gynecologic cancer.







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*Get up-to-date with leading experts in the field of gynecologic oncology, with solid clinical and academic experience”*

## International Guest Director

A pioneer in the use of **CD8+ T Cells** as a therapeutic tool for various **Viral Infections**, Dr. Otto Yang is a prestigious **Physician** highly specialized in **Cellular Immunology**. In addition, he has led multiple **scientific research** projects that have laid the groundwork for the development of innovative therapies and even vaccines.

In this sense, he has worked in health institutions of international reference such as **UCLA Health** in California. In this way, his work has been focused on the creation and implementation of modern treatments to manage conditions related to **HIV, AIDS or cancer**. Thanks to this, he has driven advances in the design of personalized immunological treatments adapted to the specific needs of each patient. As a result, he has managed to optimize the **overall well-being** of numerous patients in the long term.

Moreover, he has been a key figure in the conduct of **clinical trials** related to **COVID-19**. As such, he has conducted a variety of comprehensive analyses to evaluate the effects of therapies such as **Remdesivir, Baricitinib** and even **Monoclonal Antibodies**. Such work has been essential to identify the most effective therapeutic options and improve informed clinical decision making on a global scale in the face of the SARS-CoV-2 outbreak.

Throughout its 40-year history, its clinical excellence has been rewarded on several occasions in the form of **awards**. An example of this is the award he received from the American Association of Immunologists for his **CAR-T therapies** for the treatment of **leukemias**. In his strong commitment to advancing healthcare, he has led a wide range of projects that have received more than 30 million dollars in funding. These achievements reflect his strategic leadership in generating cutting-edge solutions that bring tangible value to society.



## Dr. Yang, Otto

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- Chief of the Division of Infectious Diseases at UCLA Health in California, United States
- Founder and Chief Medical Officer of CDR3 Therapeutics, California
- Director of Scientific Research at AIDS Healthcare Foundation, Los Angeles, Los Angeles
- Research Scientist with over 170 published papers
- Scientific Director of Ozyma, Los Angeles
- HIV Physician at MCI-Cedar Junction, Massachusetts
- Infectious Diseases Internship at Harvard Medical School
- Internal Medicine Residency at Bellevue Hospital, New York
- M.D. from Brown University
- Member of: Board of Directors at California Applied Medicine and Frontida Electronic Health Records Software



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

## International Guest Director

Dr. Nour Abuhadra is a leading international medical oncologist, recognized for her expertise and significant contributions in the field of Breast Cancer. As such, she has held important and highly responsible roles at Memorial Sloan Kettering Cancer Center (MSK), in New York, as Director of the Rare Breast Cancer Program, and also as Co-Director of the Triple Negative Breast Cancer Clinical Research Program. Indeed, her role at MSK, one of the world's leading cancer centers, has underscored her commitment to research and treatment of the most complex types of this condition.

A Doctor of Medicine from Weill Cornell Medical College in Qatar, she has had the opportunity to collaborate with thought leaders at MD Anderson Cancer Center, which has allowed her to broaden her knowledge and skills in Breast Oncology. This has significantly influenced her approach to clinical research, which has led her to focus on the development of predictive and prognostic biomarker models, particularly in Triple Negative Breast Cancer.

She has authored numerous scientific publications and has contributed significantly to the understanding of the mechanisms and treatments of Breast Cancer. In addition, her research has ranged from the identification of biomarkers to the classification of the tumor immune microenvironment to improve the use of immunotherapy.

Throughout her career, Dr. Nour Abuhadra has also been the recipient of numerous awards and recognitions, including the Conquest of Cancer Career Development Award from the American Society of Clinical Oncology (ASCO) and the Conquest of Cancer Foundation Award of Merit, also from ASCO. She has also been recognized by the American Association for Cancer Research (AACR) with the Associate Member Award.



## Dra. Abuhadra, Nour

---

- Director of the Rare Breast Cancer Program at MSK, New York, United States
- Co-Director of the Triple Negative Breast Cancer Clinical Research Program at  
at
- Memorial Sloan Kettering Cancer Center (MSK), New York
- Physician at MD Anderson Cancer Center, Texas
- Breast Cancer Specialist at the Cleveland Clinic Foundation, Ohio
- Doctor of Medicine from Weill Cornell Medicine, Qatar, Cornell University
- Awards: Career Development Award in Conquest of Cancer, ASCO (2023) ,  
Conquest of Cancer Foundation Merit Award, ASCO (2019-2021) , Associate  
Member Award, AACR (2020)
- Member of: American Association for Cancer Research (AACR)



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## International Guest Director

As one of the pioneer surgeons in Brazil in introducing advanced techniques of **Laparoscopic Oncologic Surgery** in Paraná, Dr. Reitan Ribeiro is one of the most prolific figures in this specialty. So much so that he has even received recognition as an **honorary citizen** of the city of Curitiba, highlighting his work in the creation and development of the technique of **Uterine Transposition**

The IJGC, International Journal of Gynecologic Cancer, has also recognized the outstanding work of Dr. Reitan Ribeiro. His publications on **Uterine Robotic Transposition in Cervical Cancer**, Uterine Transposition after Radical Trachelectomy and directed research on the technique of Uterine Transposition for patients with Gynecological Cancers who want to preserve fertility. He has received the **National Award for Medical Innovation** for his research in the field of Uterine Transposition, highlighting these advances in the preservation of the patient's fertility

His professional career has not been without success, as he has held **numerous positions of responsibility** at the prestigious Erasto Gaertner Hospital. He leads the research program in Gynecologic Oncology at that center, being also director of the Fellowship program in that specialty, in addition to coordinating the training program in Robotic Surgery focused on Gynecologic Oncology.

At the academic level, he has completed internships at numerous prestigious centers, including Memorial Sloan Kettering Cancer Center, McGill University and the National Cancer Institute of Brazil. He combines his clinical responsibilities with consulting work for leading companies in the medical and pharmaceutical sector, mainly Johnson & Johnson and Merck Sharp & Dohme



## Dr. Ribeiro, Reitan

---

- Research Director of the Department of Gynecologic Oncology at the Erasto Gaertner Hospital
- Director of the Fellowship Program in Gynecologic Oncology at the Erasto Gaertner Hospital
- Director of the Robotic Surgery Training Program of the Gynecologic Oncology Department of the Erasto Gaertner Hospital
- Senior Surgeon in the Department of Gynecologic Oncology, Erasto Gaertner Hospital
- Director of the Resident Oncologist Program at the Erasto Gaertner Hospital
- Consultant at Johnson & Johnson and Merck Sharp & Dohme
- Graduated in Medicine at the Federal University of Porto Alegre
- Fellowship in Gynecologic Oncologic Surgery at Memorial Sloan Kettering Cancer Center
- Fellowship in Minimally Invasive Surgery McGill University
- Internships at Governador Celso Ramos Hospital, National Cancer Institute of Brazil and Erasto Gaertner Hospital
- Certification in Oncologic Surgery by the Oncologic Surgery Society of Brazil



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## International Guest Director

Dr. Allan Covens is an international eminence in the field of **Gynecologic Oncology**. Throughout his distinguished professional career, the Postgraduate Diploma has investigated **germ cell tumors, Gestational Trophoblastic Disease, Cervical Cancer**, as well as radical and reconstructive surgical techniques. In particular, he is a reference for his medical innovations that, after different types of surgeries, aim at preserving the fertility of patients. Thanks to these contributions, he has accumulated more than 32 awards and grants.

In addition, this eminent specialist has performed **live interventions in several continents**, also taking his medical contributions to nearly 30 countries around the world through lectures. He is also the **author of more than 135 peer-reviewed publications** and has participated in 16 textbooks on Gynecologic Oncology. Another of his works is a DVD/book on **advanced laparoscopic techniques** in this field of women's health.

In turn, Dr. Covens has chaired the **Division of Gynecologic Oncology at the University of Toronto and Sunnybrook Health Sciences Centre**. At the latter institution, he directed his fellowship to train potential scientists for 13 years. He also serves on the board of the Global Curriculum Review Committee and coordinates the Rare Tumor Committee. He is also a member of MAGIC, a **multidisciplinary team developing protocols for malignant germ cell tumors**.

In addition, this distinguished scientist is on the **editorial board of the journal Cancer** and reviews articles for **Lancet Oncology, Gynecologic Oncology, International Journal of Gynecologic Cancer**, among many other specialized publications.





## Dr. Covens, Allan

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- Director of the Division of Gynecologic Oncology at the University of Toronto
- Advisor to Moi University, Eldoret, Kenya
- Past President of the International Gynecologic Cancer Society (IGCS)
- Advisor to the Editorial Board of the journal Cancer
- Specialist in Obstetrics and Gynecology from the University of Western Ontario
- Medical Degree from the University of Toronto
- Research Fellowship in Gynecologic Oncology at the University of Toronto/  
McMaster's Degree in Gynecologic Oncology
- Member of: Rare Tumor Committee, Gynecology, Cervical and Gestational  
Trophoblastic Committee of the NRG Postgraduate Certificate in Treatment and  
Management of Uterine Sarcoma

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## Management



### Dr. Muñoz Madero, Vicente

- ♦ Physician of the VOT Oncologic Surgery Unit, San Francisco de Asis
- ♦ Surgeon in SESCAM Toledo
- ♦ Oncologic Surgeon at MD Anderson International, TEDECA
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Specialist in General and Digestive System Surgery through the RMI program at the Clinical University Hospital in Toledo
- ♦ Member of the European Board of Surgical Oncology
- ♦ Member of the Spanish Society of Medical Oncology

## Professors

### Dr. Borobia Melendo, Enrique Luis

- ♦ Attending Physician for General Surgery Services at Hospital de la VOT
- ♦ General and Digestive System Surgeon at IMED Hospitals
- ♦ Chief of Surgery Service, Hospital del Aire, Hospital de la Defensa, Spain
- ♦ Air Force Service Chief
- ♦ Doctor of Medicine and Surgery, from the Complutense University of Madrid

### Dr. Muñoz Muñoz, Paula

- ♦ Resident Physician in General and Digestive System Surgery at La Paz Hospital
- ♦ Resident Intern of General and Digestive System Surgery of 5th year in the Ramón y Cajal Hospital (Madrid)
- ♦ Degree in Medicine

### Dr. García Marirrodiga, Ignacio

- ♦ Specialist in General and Digestive System Surgery
- ♦ Emergency Services Nurse at Gómez Ulla Central Defence Hospital
- ♦ Degree in Medicine and Surgery from the Autonomous University of Madrid
- ♦ Member of the Network of Esophagogastric Surgery and Obesity Teams in the Community of Madrid and Central Zone

**Dr. Muñoz Jiménez, Beatriz**

- ♦ Specialist Physician in in General and Digestive System Surgery Area. Virgen del Puerto Hospital
- ♦ Specialist. General and Digestive System Surgery. University Health Care Complex of Salamanca
- ♦ Bachelor of Medicine, University of Seville
- ♦ Specialization in Medicine at the Università Politecnica delle Marche

**Dr. Ruiz Martín, Juan**

- ♦ Specialist in Psychiatry, Toledo Hospital Complex
- ♦ Coordinator of the Digital Pathology Club of SEAP
- ♦ SEAP Quality Assurance Program Collaborator
- ♦ Doctor of Medicine
- ♦ Member of SEAP

**Dr. De Benito Moreno, Luis MARÍA**

- ♦ Radiologist expert in breast cancer
- ♦ Radiologist at Clínica Fuensanta
- ♦ Head of the Interventional of the breast Radiology Section of the Gómez Ulla Central Defense Hospital
- ♦ Area Coordinator of the Breast Screening Program of the Autonomous Community of Madrid

**Ms. González Ageitos, Ana María**

- ♦ Attending Oncology Physician, HVS Hospital Complex, Toledo
- ♦ Oncologist at Hospital Quirón
- ♦ Member of the Thrombosis Research Group
- ♦ Degree in Medicine and Surgery from the University of Santiago de Compostela
- ♦ D. in Medicine and Surgery Cone Cum Laude from the Autonomous University of Madrid

**Dr. Rodrigo Martínez, Ana Belén**

- ♦ Responsible for national project coordination, scientific support and marketing (publications) and operations at OncoDNA-BioSequence
- ♦ Degree in Biotechnology
- ♦ Master's Degree in Clinical Trials and Clinical Research Associate (CRA) in OncoDNA-BioSequence
- ♦ Expert in Molecular Biology, Genetics and Microbiology
- ♦ Project management in research and development, oncology and laboratory work

**Dr. López, Escarlata**

- ♦ Chief Medical Officer (CMO) of GenesisCare-Spain. Member of the Spanish National Commission of the Specialty. Accredited by the Health Quality Agency of the Andalusian Health Service (SAS) as an Expert in Radiation Oncology
- ♦ Head of Radiation Oncology Department, Jiménez Díaz Foundation. Madrid, Spain
- ♦ Spanish at the School of Treatment Oncology (EEOR)
- ♦ Assistant Physician Virgen de Las Nieves Hospital
- ♦ Professor accredited by the National Agency for Quality Assessment and Accreditation (ANECA)
- ♦ Doctor Cum Laude and Extraordinary Doctorate Award the University of Granada
- ♦ Degree in Medicine and Surgery
- ♦ Expert in Radiation Oncology Health Quality Agency of the Andalusian Health Service (SAS)
- ♦ Member of: Spanish Society of Radiation Oncology, Spanish Society of Radiosurgery, Iberolatinoamerican Society of Radiosurgery

**Dr. García, Graciela**

- ◆ Specialist in Breast Cancer and Palliative Medicine
- ◆ GenesisCare Breast Cancer Program Coordinator
- ◆ Head of GenesisCare's Radiotherapy Service at the San Francisco de Asís Hospital
- ◆ Adjunct in the Radiotherapy Unit of the Milagrosa in Tomotherapy
- ◆ Start-up and Coordination of the Breast Cancer Unit of La Milagrosa Hospital in GenesisCare-Imonology
- ◆ Advisor of the TECHNIQUES Committee of the Spanish Association Against Cancer
- ◆ University and medical practice teacher
- ◆ Responsible for the Primary and Secondary Prevention programs of the Spanish Association Against Cancer
- ◆ National Coordinator of the Food and Cancer Strategy for the Spanish Association Against Cancer
- ◆ Assistant Physician at the Clinic of Radiotherapy and Nuclear Medicine in Valladolid
- ◆ PhD in Research Sufficiency by the Instituto Universitario del Deporte at the Valladolid School of Medicine
- ◆ Master's Degree in Aesthetic Medicine from the Complutense University of Madrid
- ◆ Specialist of the Oncology Radiotherapy, Oncology Department, de Valladolid University Hospital
- ◆ University Specialist in Palliative Medicine from the Institute of Medical Sciences
- ◆ Degree in Medicine and Surgery from the Medical University of Oviedo
- ◆ Post-graduate complementary training at the Gustave-Roussy Institute in Paris



**Dr. Hernández Gutiérrez, Jara**

- ◆ Specialist in General and Digestive System Surgery
- ◆ Physician in the General and Digestive System Surgery Service of the Toledo University Hospital Complex
- ◆ Specialist Physician in General and Digestive System Surgery at La Paz Hospital
- ◆ Best Clinical Case Award at the National Surgery Meeting

**Dr. Flores Sánchez, Álvaro**

- ◆ Specialist in Oncology Radiotherapy
- ◆ Radiation Oncology/Clinical Consultant at GenesisCare Spain
- ◆ Specialist in Radiation Oncology at GenesisCare Campo de Gibraltar, Algeciras, Spain
- ◆ Doctor Specialist in Radiation Oncology at GenesisCare Malaga
- ◆ Radiation Oncologist in Ceuta Medical Center
- ◆ Consultant Clinical Oncologist at St. Bernard's Hospital, Gibraltar, UK
- ◆ Doctor Specialist in Radiation Oncology at GenesisCare Jerez
- ◆ Consultant Radiation Oncologist at Cork University Hospital, Irlanda
- ◆ Radiation Oncologist at University Hospital Galway, Irlanda
- ◆ Specialist in Oncology Radiotherapy at IMO Seville
- ◆ International rotations and fellows: Memorial Sloan Kettering Cancer Center (New York, USA), Hospital Universitario Ramón y Cajal (Madrid) and Hospital Universitario Virgen del Rocío (Seville)

**Dr. Serradilla, Ana**

- ◆ Specialist in Radiation Oncology
- ◆ Coordinates the Area Specialist in Radiation Oncology at Hospital Torrecárdenas
- ◆ GenesisCare Clinic Coordinator. Jerez de la Frontera, Cádiz
- ◆ Medical Director JEISAMED Clinics. Jerez de la Frontera, Cádiz
- ◆ Medical Director JEISAMED Clinics. Algeciras
- ◆ Assistant Physician, Radiation Oncology in. CROASA, Málaga
- ◆ Degree in Medicine and Surgery University of Malaga
- ◆ Radiation Oncology Specialist in Regional Hospital, Malaga
- ◆ Member of: ESTRO, SER, SAC, GECAPRO

**Ms. Martín López, Irene**

- ◆ Clinical Research Associate en OncoDNA-BioSequence
- ◆ Scientific-Technical Coordinator at Bemygene Health Company
- ◆ Master's Degree in Biomedicine and Molecular Oncology in the University of Oviedo
- ◆ Professional Master's Degree in Direction and Monitoring of Clinical Trials
- ◆ Graduate in Biotechnology, University Polytechnic of Valencia

05

# Structure and Content

The program includes high quality multimedia material, such as work guides, detailed videos and interactive resources, which enrich the participant's learning experience and facilitate the understanding of key concepts. Specialists will have access to a wide variety of educational resources that complement the theoretical classes, which will allow them to deepen their knowledge of the topics in a practical and applied manner.



“

*Access workbooks, detailed videos and other high-quality interactive resources to enrich your learning experience”*

### Module 1. Biological Basis of Cancer

- 1.1. Cell Growth Regulation
- 1.2. Carcinogenesis and Carcinogens
- 1.3. Genetics of Cancer
- 1.4. Mechanisms of Apoptosis and Programmed Cell Death
- 1.5. Molecular Mechanisms of Cancer Production and Metastasis
- 1.6. Origin of Genetic Alterations
- 1.7. Epigenetic Changes and Oncogenes
- 1.8. Angiogenesis

### Module 2. Basis of Chemotherapy Treatment, Adverse Effects and New Therapies

- 2.1. Introduction
- 2.2. Justification for the Use of Chemotherapy
- 2.3. Development of Cancer and the Influence of Chemotherapy
  - 2.3.1. Tumor Growth
  - 2.3.2. Cellular Cycle
  - 2.3.3. Specific Drugs for each of the Cellular Phases
- 2.4. Factors that Influence Treatment
  - 2.4.1. Tumor Characteristics
  - 2.4.2. Patient Tolerance
  - 2.4.3. Treatment Objectives
  - 2.4.4. Pharmacological Factors and Administration Routes
- 2.5. Principles of Resistance to Drugs
- 2.6. Combined Therapies
- 2.7. Treatment or Dosis Adjustments
- 2.8. Drug Toxicity
- 2.9. General Management of Secondary Effects and Complications of Chemotherapy

- 2.10. Antineoplastic Agents in Gynecology
  - 2.10.1. Alkylating Agents
  - 2.10.2. Antibiotics
  - 2.10.3. Antimetabolites
  - 2.10.4. Plant Alkaloids
  - 2.10.5. Topoisomerase 1 Inhibitors
  - 2.10.6. Antiangiogenic Drugs
  - 2.10.7. PARP Inhibitors
  - 2.10.8. Tyrosine Kinase Inhibitors
  - 2.10.9. Other Drugs
- 2.11. Future Indications

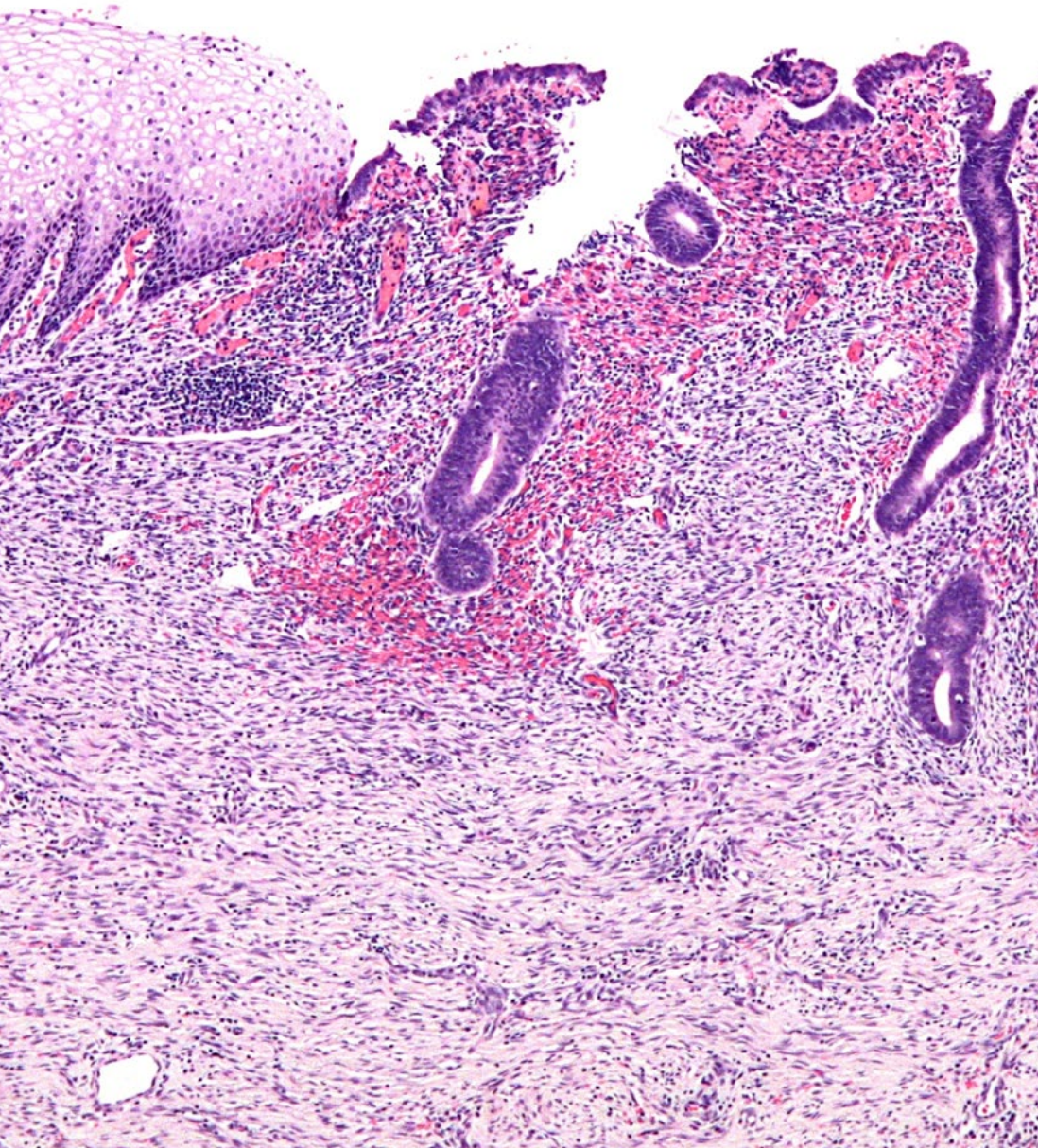
### Module 3. Endometrial Cancer I

- 3.1. Epidemiology and Etiopathogenesis
- 3.2. Precancerous Lesions
- 3.3. Hereditary Carcinoma
- 3.4. Pathological Anatomy and Different Types of Tumors
- 3.5. Diagnostic Process
- 3.6. Imaging Tests, Tumor Markers and Possible Screening
- 3.7. Molecular Diagnostic Tests
- 3.8. FIGO Classification and Others

### Module 4. Endometrial Cancer II

- 4.1. Introduction
- 4.2. General Aspects of Surgical Treatment
- 4.3. Low Risk Tumors (Stage I, Grade 1)
- 4.4. High Risk Tumors (Grade 2-3, Serous or Clear Cells)
- 4.5. Laparotomy vs. Laparoscopy
- 4.6. Introduction of Robotic Surgery
- 4.7. Surgical Technique for High Risk Tumors





- 4.8. Adjuvant Treatment
  - 4.8.1. Observation without Additional Treatment
    - 4.8.1.1. Low Risk, Early Stage, Low Grade
  - 4.8.2. Adjuvant Radiotherapy
    - 4.8.2.1. Early Stage, Intermediate and High Risk
    - 4.8.2.2. Advanced Stages
  - 4.8.3. Adjuvant Chemotherapy
  - 4.8.4. Peculiarities of Serous Tumors and Clear Cells
- 4.9. Hormonal Treatment
- 4.10. Recurrent Endometrial Cancer
  - 4.10.1. Surgical Management
  - 4.10.2. Radiotherapy
  - 4.10.3. Chemotherapy
- 4.11. Follow-up Treatment of Endometrial Cancer
- 4.12. Prognosis

## Module 5. Cervical Cancer I

- 5.1. Epidemiology and Etiopathogenesis of the Disease
- 5.2. Precancerous Lesions and the Evolutionary Process
- 5.3. Risk Factors for Contracting the Disease
- 5.4. Notions about Cervical Pathology and HPV
- 5.5. Normal Colposcopy and Vulvoscopy
- 5.6. Abnormal Colposcopy and Vulvoscopy
- 5.7. Cervical Cancer Screening
- 5.8. Hereditary Carcinoma
- 5.9. Forms of Presentation in Anatomic Pathology
- 5.10. Diagnostic Process: Imaging Tests and Tumor Markers
- 5.11. Role of New Technologies such as PET-CT
- 5.12. FIGO and TNM Classification in Cervical Carcinoma

## Module 6. Cervical Cancer II

- 6.1. Treatment of Cervical Intraepithelial Neoplasia (CIN)
  - 6.1.1. CIN Surgery
  - 6.1.2. CIN Immunotherapy
- 6.2. Invasive Treatment of Cervical Cancer
  - 6.2.1. Radical Hysterectomy with Nerve Preservation
  - 6.2.2. Less Radical Hysterectomy
  - 6.2.3. Radical Endoscopic Hysterectomy
  - 6.2.4. Selective Sentinel Node Biopsy
  - 6.2.5. Para-Aortic Advanced Stage Lymphadenectomy Staging
- 6.3. Radiotherapy and Chemotherapy
  - 6.3.1. Concurrent Chemoradiotherapy
  - 6.3.2. Enhanced Radiation Therapy Treatment Modalities
  - 6.3.3. Chemotherapy Modalities in Concurrent Treatment
  - 6.3.4. Preoperative Chemoradiotherapy
  - 6.3.5. Adjuvant Therapy after a Radical Hysterectomy
  - 6.3.6. Neoadjuvant Chemotherapy
  - 6.3.7. Adjuvant Therapy after Neoadjuvant and Previous Surgery
- 6.4. Treatment of Metastasis, Recurrent or Persistent Disease
  - 6.4.1. Surgical Management
  - 6.4.2. Chemotherapy
- 6.5. Management of Cervical Adenocarcinoma
  - 6.5.1. Adenocarcinoma in Situ (AIS)
  - 6.5.2. Comparison Between Squamous Cell Carcinomas and Adenocarcinomas
  - 6.5.3. Surgery vs. Radiotherapy in Invasive Adenocarcinoma
  - 6.5.4. Chemotherapy
- 6.6. Monitoring

## Module 7. Ovarian Cancer I

- 7.1. Epidemiology of Ovarian and Fallopian Tube Cancer
- 7.2. Etiopathogenesis and tubal origin, new trends
- 7.3. Precancerous Lesions in the Fallopian Tubes
- 7.4. Ovarian Cancer Screening
- 7.5. Hereditary Carcinoma and How to Evaluate It
- 7.6. Histological Forms and Pathological Anatomy
- 7.7. Diagnostic Process
  - 7.7.1. Clinical Symptoms
  - 7.7.2. Ultrasound
  - 7.7.3. Computerized Tomography
  - 7.7.4. Magnetic Resonance
  - 7.7.5. Positron Emission Tomography
- 7.8. Serum Tumor Markers
  - 7.8.1. CA125
  - 7.8.2. HE4
  - 7.8.3. CA19.9.
  - 7.8.4. CEA
  - 7.8.5. Other Markers
- 7.9. FIGO Classification of the Disease

## Module 8. Ovarian Cancer II

- 8.1. General Surgical Treatment
- 8.2. Complete Cytoreduction and Primary Debulking
- 8.3. Neoadjuvant Treatment and When to Choose It
- 8.4. Interval and Second Look Treatments
- 8.5. Adjuvant Therapy: Carboplatin-Taxol and Other Options
- 8.6. Radiotherapy: What Role Does it Play?
- 8.7. Hormonal Therapy Possibilities in Ovarian Cancer
- 8.8. Prognosis and Disease-Free Interval
- 8.9. Monitoring and Treatment of Relapses
- 8.10. Controversies in the Management of Ovarian Cancer
- 8.11. Peritoneal Carcinomas Hyperthermic Therapy
- 8.12. Intraperitoneal Chemotherapy, Indications and Results

## Module 9. Vulvar Cancer I

- 9.1. Epidemiology and Relationship with HPV
- 9.2. Etiopathogenesis and Precancerous Lesions
- 9.3. VIN I, II, III VAIN and Other Lesions
- 9.4. Vulvar Cancer Screening
- 9.5. Hereditary Carcinoma
- 9.6. Anatomical Pathology and Histological Types
- 9.7. Imaging Tests and Extension Study
- 9.8. Tumor Markers: SCC

## Module 10. Vulvar Cancer II

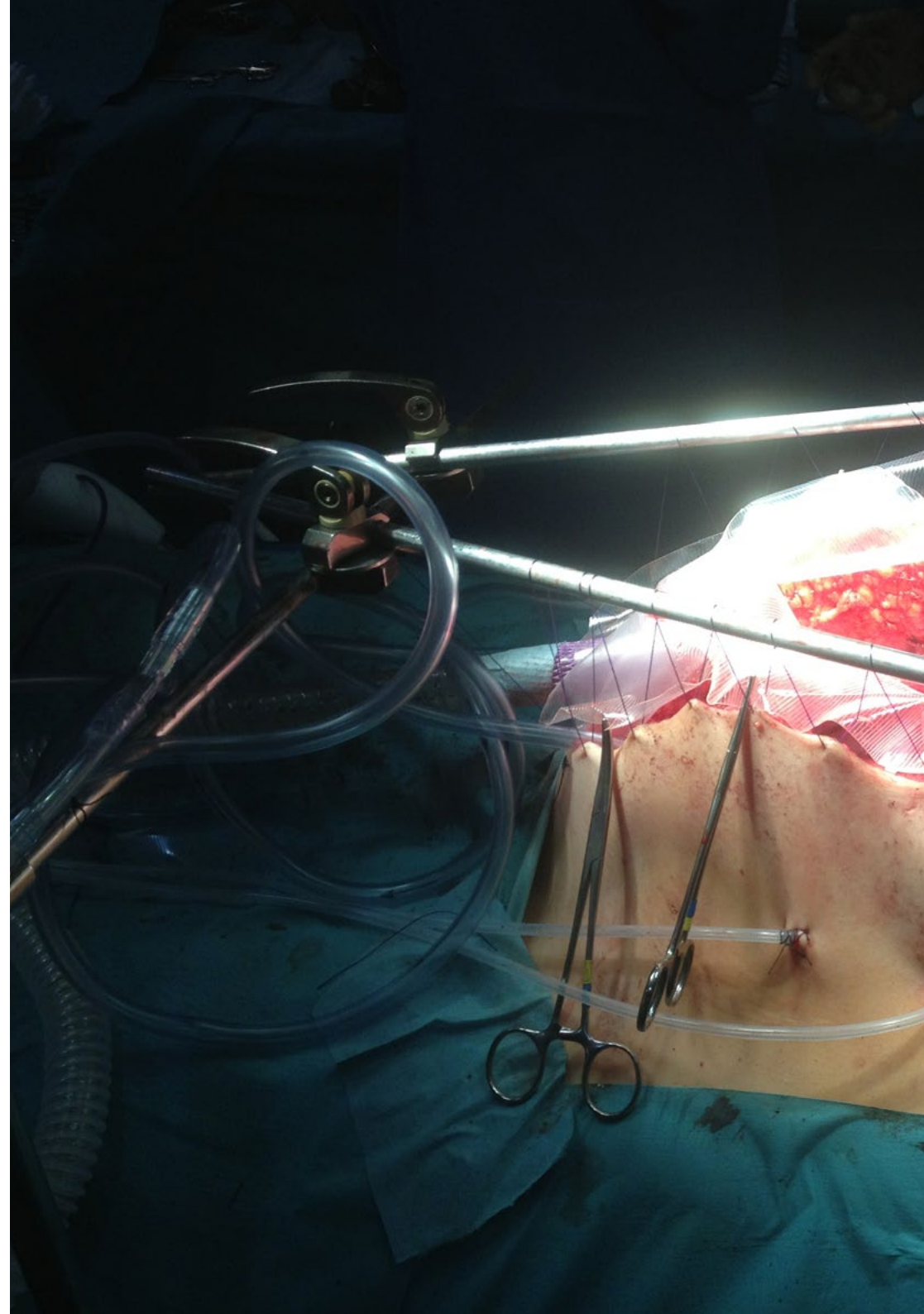
- 10.1. Introduction
- 10.2. Vulvar Paget's Disease
  - 10.2.1. General Aspects
  - 10.2.2. Paget's Disease Type 1
    - 10.2.2.1. Prevalence
    - 10.2.2.2. Clinical Characteristics
    - 10.2.2.3. Diagnosis
    - 10.2.2.4. Treatment
  - 10.2.3. Paget's Disease Type 2 and 3
- 10.3. Invasive Paget's Disease
  - 10.3.1. General Aspects
  - 10.3.2. Prognosis
- 10.4. Invasive Vulva Carcinoma
  - 10.4.1. Squamous Cell Carcinoma
  - 10.4.2. Clinical Characteristics
  - 10.4.3. Diagnosis
  - 10.4.4. Dissemination Pathways
  - 10.4.5. Staging

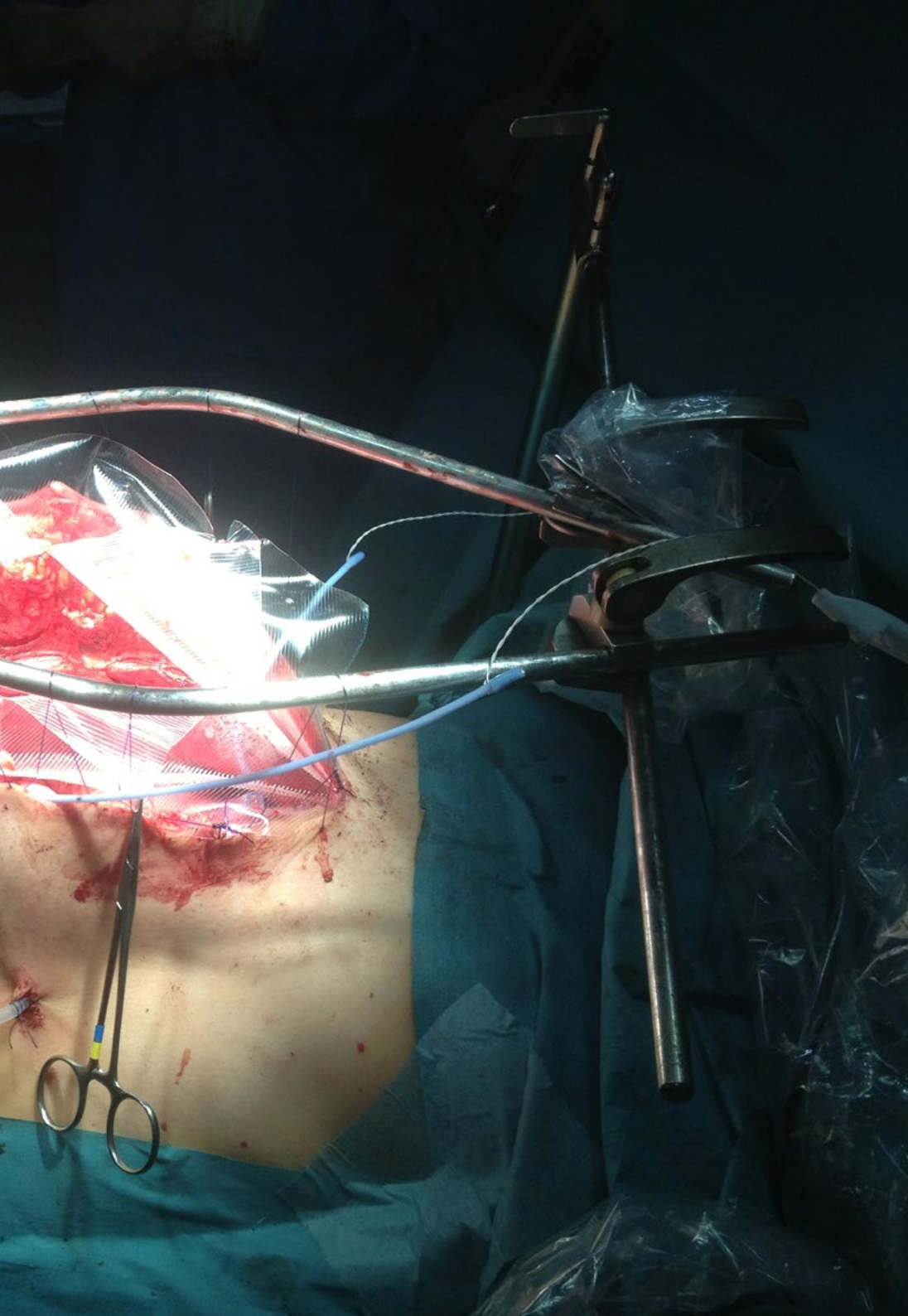
- 10.4.6. Treatment
  - 10.4.6.1. Primary Lesion Management
  - 10.4.6.2. Local Control after Primary Surgical Treatment
  - 10.4.6.3. Management of Ganglionic Chains
  - 10.4.6.4. Post-Operative Care
    - 10.4.6.4.1. Early postoperative complications
    - 10.4.6.4.2. Late Postoperative Complications
  - 10.4.6.5. Use of Sentinel Lymph Node
    - 10.4.6.5.1. Advanced Disease
    - 10.4.6.5.2. General Aspects
    - 10.4.6.5.3. Management of Ganglionic Chains
    - 10.4.6.5.4. Management of Primary Tumor
      - 10.4.6.5.4.1. Surgery
      - 10.4.6.5.4.2. Radiotherapy
      - 10.4.6.5.4.3. Chemotherapy
  - 10.4.6.6. Role of radiotherapy in vulvar cancer
- 10.4.7. Recurrent Vulvar Cancer
- 10.4.8. Prognosis
- 10.4.9. Monitoring
- 10.5. Vulva Melanoma
  - 10.5.1. Introduction
  - 10.5.2. Clinical Characteristics
  - 10.5.3. Pathologic Anatomy
  - 10.5.4. Staging
  - 10.5.5. Treatment
    - 10.5.5.1. Primary Lesion Management
    - 10.5.5.2. Management of Ganglionic Chains
  - 10.5.6. Prognosis
- 10.6. Bartholin's Gland Carcinoma
  - 10.6.1. General Aspects
  - 10.6.2. Treatment
  - 10.6.3. Prognosis

- 10.7. Basal Cell Carcinoma
- 10.8. Verrucous Carcinoma
- 10.9. Vulva Sarcoma
  - 10.9.1. Introduction
  - 10.9.2. Leiomyosarcoma
  - 10.9.3. Epithelioid Sarcoma
  - 10.9.4. Rhabdomyosarcoma
  - 10.9.5. Merkel Cells Carcinoma

## Module 11. Uterine Sarcoma I

- 11.1. Introduction
- 11.2. Epidemiology
  - 11.2.1. Incidence
  - 11.2.2. Age
  - 11.2.3. Histological Distribution
  - 11.2.4. Racial Distribution
- 11.3. Risk Factors
  - 11.3.1. Heritage
  - 11.3.2. Hormone Therapy
  - 11.3.3. Radiation Exposure
- 11.4. Pathologic Anatomy
  - 11.4.1. Leiomyosarcoma
  - 11.4.2. STUMP
  - 11.4.3. Benign Metastasizing Leiomyoma
  - 11.4.4. Carcinosarcoma
  - 11.4.5. Endometrial Stromal Neoplasms
  - 11.4.6. Stromal Nodule
  - 11.4.7. Endometrial Stromal Sarcoma
  - 11.4.8. Mullerian Adenosarcoma
- 11.5. Clinical Manifestations
- 11.6. Imaging Tests
  - 11.6.1. Magnetic Resonance
  - 11.6.2. Tumor Markers
- 11.7. FIGO Staging
- 11.8. Conclusions





## Module 12. Uterine Sarcoma II

- 12.1. Introduction
- 12.2. Uterine Leiomyosarcoma
  - 12.2.1. Early Stages
    - 12.2.1.1. Surgery
    - 12.2.1.2. Adjuvant Radiotherapy
    - 12.2.1.3. Chemotherapy
  - 12.2.2. Recurrent or Metastatic Disease
    - 12.2.2.1. Surgery
    - 12.2.2.2. Chemotherapy
    - 12.2.2.3. Hormone Therapy
  - 12.2.3. Prognostic Factors
- 12.3. Endometrial Stromal Sarcoma
  - 12.3.1. Early Stages
    - 12.3.1.1. Surgery
    - 12.3.1.2. Pelvic Radiotherapy
    - 12.3.1.3. Hormone Therapy
  - 12.3.2. Recurrent or Metastatic Disease
    - 12.3.2.1. Surgery
    - 12.3.2.2. Chemotherapy or Radiotherapy
  - 12.3.3. Prognostic Factors
- 12.4. Undifferentiated Endometrial Sarcoma
  - 12.4.1. Early Stages
    - 12.4.1.1. Surgery
    - 12.4.1.2. Adjuvant Radiotherapy
    - 12.4.1.3. Chemotherapy
  - 12.4.2. Recurrent or Metastatic Disease
    - 12.4.2.1. Surgery
    - 12.4.2.2. Chemotherapy or Radiotherapy
  - 12.4.3. Prognostic Factors
- 12.5. Conclusions

### Module 13. Fertility Preservation

- 13.1. Indications of Fertility Preservation
- 13.2. Gametes Preservation
- 13.3. Role of Assisted Reproduction Techniques
- 13.4. Conservative Surgical Treatment
- 13.5. Oncological Prognosis after Fertility Conservation
- 13.6. Reproductive Results
- 13.7. Dealing with Pregnant Women with Gynecologic Cancer
- 13.8. New research paths and literature updates
- 13.9. Conservation of Ovarian Tissue
- 13.10. Uterine and Gonadal Tissue Transplantation

### Module 14. Uncommon Gynecologic Tumors

- 14.1. Vagina Cancer
  - 14.1.1. Introduction
  - 14.1.2. Clinical Manifestations
  - 14.1.3. Diagnosis
  - 14.1.4. Pathologic Anatomy
    - 14.1.4.1. Squamous Carcinoma
    - 14.1.4.2. Adenocarcinoma
    - 14.1.4.3. Sarcoma
    - 14.1.4.4. Melanoma
  - 14.1.5. Tumor Staging
  - 14.1.6. Treatment of Disease
    - 14.1.6.1. Surgery
    - 14.1.6.2. Radiotherapy
    - 14.1.6.3. Treatment Complications
  - 14.1.7. Monitoring
  - 14.1.8. Prognosis

- 14.2. Gestational Trophoblastic Disease
  - 14.2.1. Introduction and Epidemiology
  - 14.2.2. Clinical Forms
    - 14.2.2.1. Hydatidiform Mole
      - 14.2.2.1.1. Complete Hydatidiform Mole
      - 14.2.2.1.2. Partial Hydatidiform Mole
    - 14.2.2.2. Gestational Trophoblastic Neoplasm
      - 14.2.2.2.1. After Molar Pregnancy
        - 14.2.2.2.1.1. Persistent Gestational Trophoblastic Neoplasm
      - 14.2.2.2.2. After Non-Molar Pregnancy
        - 14.2.2.2.2.1. Choriocarcinoma
        - 14.2.2.2.2.2. Placental Site Trophoblastic Tumor
  - 14.2.3. Diagnosis
    - 14.2.3.1. Human Chorionic Gonadotropin
    - 14.2.3.2. Ultrasound Study
      - 14.2.3.2.1. Complete Mole
      - 14.2.3.2.2. Partial Mole
      - 14.2.3.2.3. Invasive Mole
      - 14.2.3.2.4. Choriocarcinoma and Placental Site Tumor
    - 14.2.3.3. Other Imaging Techniques
  - 14.2.4. Pathologic Anatomy
    - 14.2.4.1. Hydatidiform Mole
      - 14.2.4.1.1. Complete Mole
      - 14.2.4.1.2. Partial Mole
    - 14.2.4.2. Invasive Mole
    - 14.2.4.3. Choriocarcinoma
    - 14.2.4.4. Placental Site Trophoblastic Tumor
    - 14.2.4.5. Epithelioid Trophoblastic Tumor
  - 14.2.5. Staging

- 14.2.6. Treatment
  - 14.2.6.1. Chemotherapy
    - 14.2.6.1.1. Low Risk Disease
    - 14.2.6.1.2. High Risk Disease and Metastasis
    - 14.2.6.1.3. Chemoresistant Disease
  - 14.2.6.2. Surgery
    - 14.2.6.2.1. Molar Evacuation
    - 14.2.6.2.2. Hysterectomy
    - 14.2.6.2.3. Myometrial Resection
    - 14.2.6.2.4. Pulmonary Resection
    - 14.2.6.2.5. Craniotomy
    - 14.2.6.2.6. Other Surgical Procedures
    - 14.2.6.2.7. Selective Arterial Embolization
- 14.2.7. Post-Treatment Monitoring
  - 14.2.7.1. Monitoring after Molar Evacuation
  - 14.2.7.2. Monitoring after Gestational Neoplasm Treatment
- 14.2.8. Prognosis
- 14.3. Metastatic Tumor in the Genital Tract
  - 14.3.1. Introduction
  - 14.3.2. Clinical Manifestations
    - 14.3.2.1. Secondary Tumors in the Uterine Body or Cervix
      - 14.3.2.2.1. From Genital or Pelvic Organs
      - 14.3.2.2.2. From Extragenital or Pelvic Organs
    - 14.3.2.2. Secondary Tumors in the Vagina
    - 14.3.2.3. Secondary Tumors on the Vulva
    - 14.3.2.4. Secondary Tumors in the Ovaries
  - 14.3.3. Diagnosis
  - 14.3.4. Pathologic Anatomy
    - 14.3.4.1. Gastrointestinal Tumors
      - 14.3.4.1.1. Metastasis of Intestinal Cancer
      - 14.3.4.1.2. Krukenberg Tumor
    - 14.3.4.2. Ovarian Lymphoma
  - 14.3.5. Treatment and Prognosis

- 14.4. Neuroendocrine Tumors
  - 14.4.1. Introduction
  - 14.4.2. Pathologic Anatomy
    - 14.4.2.1. Well-Differentiated Tumors
    - 14.4.2.2. Poorly-Differentiated Tumors
  - 14.4.3. Clinical Manifestations and Diagnosis
    - 14.4.3.1. Small Cell Tumor in the Vulva and Vagina
    - 14.4.3.2. Small Cell Tumor in the Uterus
    - 14.4.3.3. Neuroendocrine Tumors in the Cervix
      - 14.4.3.3.1. Small Cell Neuroendocrine Carcinoma
      - 14.4.3.3.2. Carcinoma neuroendocrino células grandes
    - 14.4.3.4. Ovarian, Fallopian Tube and Wide Ligament Tumor
      - 14.4.3.4.1. Ovarian Carcinoid
        - 14.4.3.4.1.1. Insular Carcinoid
        - 14.4.3.4.1.2. Trabecular Carcinoid
        - 14.4.3.4.1.3. Mucinous Carcinoid
        - 14.4.3.4.1.4. Strumal Carcinoid
      - 14.4.3.4.2. Small Cell Lung Type
      - 14.4.3.4.3. Undifferentiated Non-Small Cell Carcinoma
  - 14.4.4. Treatment
  - 14.4.5. Monitoring
  - 14.4.6. Prognosis
- 14.5. Rectovaginal Septum Tumors

## Module 15. Palliative Care and Nutrition

- 15.1. Introduction
  - 15.1.1. Symptomology Associated with Gynecologic Tumors
- 15.2. Pain
- 15.3. Gastrointestinal Symptoms
  - 15.3.1. Diarrhea
  - 15.3.2. Constipation
  - 15.3.3. Malignant Intestinal Obstruction
    - 15.3.3.1. Conservative Treatment
    - 15.3.3.2. Surgical Management

- 15.4. Ascites
- 15.5. Respiratory symptoms
  - 15.5.1. Pleural Effusion
- 15.6. Edema
- 15.7. Anorexia and Weight Loss
- 15.8. Deep Vein Thrombosis
- 15.9. Pelvic Disease Progression
  - 15.9.1. Vaginal Bleeding
  - 15.9.2. Fistulas
- 15.10. Palliative Pelvic Exenteration
- 15.11. Metastasis of Other Organs
  - 15.11.1. Liver
  - 15.11.2. Brain
  - 15.11.3. Bone
    - 15.11.3.1. Hypercalcemia
- 15.12. Anxiety and Depression
- 15.13. Dying Patient Care

## Module 16. Diagnostics in Mastology

- 16.1. Introduction to Imaging Diagnosis in Mastology
- 16.2. Radiological Interpretation in Breast Pathologies
- 16.3. Nodule and Asymmetries Breasts
- 16.4. Diagnostic Management of Microcalcifications and Distortion of the Breast Architecture
- 16.5. Mammary Interventionism
- 16.6. Pre-Treatment Clinical Staging in Breast Cancer
- 16.7. Other Indications of Mammary Magnetic Resonance
- 16.8. Treated and Operated Breast
- 16.9. Rare Breast Pathology. Special Situations
- 16.10. Advances in Mammary Diagnosis and Interventionism

## Module 17. Pathologic Anatomy

- 17.1. Introduction to Breast Pathological Anatomy
  - 17.1.1. Concepts. Anatomopathological Language
  - 17.1.2. Methods for Studying Pathological Anatomy
  - 17.1.3. Types of Samples
  - 17.1.4. Clinical and Radiological Correlation
    - 17.1.4.1. Surgical Specimen Orientation
  - 17.1.5. Diagnosis: The Anatomopathological Report
  - 17.1.6. Normal Breast
- 17.2. Benign Epithelial Tumors Papillary Neoplasms Premalignant Lesions
  - 17.2.1. Benign Epithelial Proliferations and Precursors
    - 17.2.1.1. Usual Ductal Hyperplasia
    - 17.2.1.2. Columnar Cell Lesions, Including Flat Epithelial Atypia
    - 17.2.1.3. Atypical Ductal Hyperplasia
  - 17.2.2. Adenosis and Benign Sclerosing Lesions
    - 17.2.2.1. Sclerosing Adenosis
    - 17.2.2.2. Adenosis and Apocrine Adenoma
    - 17.2.2.3. Adenosis Microglandular
    - 17.2.2.4. Radial Scar and Complex Sclerosing Lesion
  - 17.2.3. Adenomas
    - 17.2.3.1. Tubular Adenoma
    - 17.2.3.2. Lactational Adenoma
    - 17.2.3.3. Ductal Adenoma
  - 17.2.4. Epithelial-Myoepithelial Tumors
    - 17.2.4.1. Pleomorphic Adenoma
    - 17.2.4.2. Adenomyoepithelioma
  - 17.2.5. Papillary Neoplasms
    - 17.2.5.1. Intraductal Papilloma
    - 17.2.5.2. Papillary Ductal Carcinoma in situ
    - 17.2.5.3. Encapsulated Papillary Carcinoma
    - 17.2.5.4. Solid Papillary Carcinoma in situ



- 17.2.6. Non-Invasive Lobular Neoplasia
  - 17.2.6.1. Atypical Lobular Hyperplasia
  - 17.2.6.2. Lobular Carcinoma in situ
- 17.2.7. Ductal Carcinoma in situ
- 17.3. Malignant Epithelial Tumors
  - 17.3.1. Infiltrating Carcinoma and Subtypes
    - 17.3.1.1. Infiltrating Carcinoma Without a Special Subtype
    - 17.3.1.2. Microinfiltrating Carcinoma
    - 17.3.1.3. Infiltrating Lobular Carcinoma
    - 17.3.1.4. Tubular Carcinoma
    - 17.3.1.5. Cribriform Carcinoma
    - 17.3.1.6. Mucinous Carcinoma
    - 17.3.1.7. Mucinous Cystadenocarcinoma
    - 17.3.1.8. Infiltrating Micropapillary Carcinoma
    - 17.3.1.9. Infiltrating Solid Papillary Carcinoma
    - 17.3.1.10. Infiltrating Papillary Carcinoma
    - 17.3.1.11. Carcinoma with Apocrine Differentiation
    - 17.3.1.12. Metaplastic Carcinoma
  - 17.3.2. Saliva Gland Type Carcinomas
    - 17.3.2.1. Acinar Cell Carcinoma
    - 17.3.2.2. Adenoid Cystic Carcinoma
    - 17.3.2.3. Secretor Carcinoma
    - 17.3.2.4. Mucoepidermoid Carcinoma
    - 17.3.2.5. Polymorphous Adenocarcinoma
    - 17.2.2.6. Tall Cell Carcinoma with Reverse Polarization
  - 17.3.3. Neuroendocrine Neoplasms
    - 17.3.3.1. Neuroendocrine Tumor
    - 17.3.3.2. Neuroendocrine Carcinoma
- 17.4. Fibroepithelial Tumors Nipple-areola complex Tumors Hematolymphoid Tumors
  - 17.4.1. Fibroepithelial Tumors
    - 17.4.1.1. Hamartoma
    - 17.4.1.2. Fibroadenoma
    - 17.4.1.3. Tumor Phyllodes
  - 17.4.2. Nipple-areola Complex Tumors
    - 17.4.2.1. Syringomatous Tumor
    - 17.4.2.2. Nipple Adenoma
    - 17.4.2.3. Paget's Disease of the Breast
  - 17.4.3. Hematolymphoid Tumors
    - 17.4.3.1. MALT Lymphoma
    - 17.4.3.2. Follicular Lymphoma
    - 17.4.3.3. Diffuse Large B-cell Lymphoma
    - 17.4.3.4. Burkitt Lymphoma
    - 17.4.3.5. Anaplastic Large Cell Lymphoma Associated with Breast Implantation
- 17.5. Mesenchymal Tumors
  - 17.5.1. Vascular Tumours
    - 17.5.1.1. Hemangioma
    - 17.5.1.2. Angiomatosis
    - 17.5.1.3. Atypical Vascular Lesions
    - 17.5.1.4. Primary Angiosarcoma
    - 17.5.1.5. Post-Radiation Angiosarcoma
  - 17.5.2. Fibroblastic and Myofibroblastic Tumors
    - 17.5.2.1. Nodular Fascitis
    - 17.5.2.2. Myofibroblastoma
    - 17.5.2.3. Desmoid Fibromatosis
    - 17.5.2.4. Inflammatory Myofibroblastic Tumor
  - 17.5.3. Peripheral Nerve Sheath Tumors
    - 17.5.3.1. Schwannoma
    - 17.5.3.2. Neurofibroma
    - 17.5.3.3. Granular Cells Tumor
  - 17.5.4. Smooth Muscle Tumors
    - 17.5.4.1. Leiomyoma
    - 17.5.4.2. Leiomyosarcoma
  - 17.5.5. Adipocytic Tumors
    - 17.5.5.1. Lipoma
    - 17.5.5.2. Angiolipoma
    - 17.5.5.3. Liposarcomas

- 17.6. Clinical Pathological Special Situations Genetic Tumor Syndromes
  - 17.6.1. Clinical Pathological Special Situations
    - 17.6.1.1. Young Woman
    - 17.6.1.2. Pregnancy and Lactation
    - 17.6.1.3. Elderly Woman
    - 17.6.1.4. Men
    - 17.6.1.5. Hidden
    - 17.6.1.6. Inflammatory Carcinoma
  - 17.6.2. Genetic Tumor Syndromes
    - 17.6.2.1. BRCA1/2-Associated Hereditary Breast and Ovarian Cancer Syndrome
    - 17.6.2.2. Cowden Syndrome
    - 17.6.2.3. Ataxia-Telangiectasia
    - 17.6.2.4. TP53-Associated Li-Fraumeni Syndrome
    - 17.6.2.5. CHEK2-Associated Li-Fraumeni Syndrome
    - 17.6.2.6. CDH1-Associated Breast Cancer
    - 17.6.2.7. Cancer Associated with PALB2
    - 17.6.2.8. Peutz-Jeghers Syndrome
    - 17.6.2.9. Neurofibromatosis Type I
- 17.7. Non-Tumorous Pathology
  - 17.7.1. Pseudoangiomatous Stromal Hyperplasia
  - 17.7.2. Diabetic Mastopathy
  - 17.7.3. Fibrosis
  - 17.7.4. Mondor Disease
  - 17.7.5. Changes Due to Breastfeeding
  - 17.7.6. Mastitis
    - 17.7.6.1. Mastitis Granulomatosa
    - 17.7.6.2. Mastitis Non-Granulomatosa
- 17.8. Prognosis
  - 17.8.1. Tumor Grade
  - 17.8.2. Pathological Staging
  - 17.8.3. Surgical Border
  - 17.8.4. Sentinel Lymph Node
    - 17.8.4.1. OSNA





- 17.8.5. Treatment-Oriented Immunohistochemistry Classes
- 17.8.6. Nomograms
  - 17.8.6.1. Cases
- 17.9. Prediction
  - 17.9.1. Evaluation of Response to Neoadjuvant Treatment
  - 17.9.2. Prediction of the Response to Chemotherapy Treatment
    - 17.9.2.1. Genetic Platforms Oncotype DX, Mamaprint, PAM50
  - 17.9.3. Therapeutic Targets
  - 17.9.4. NGS
  - 17.9.5. Digital and Computational Pathology
    - 17.9.5.1. Cases
- 17.10. Multimodality
  - 17.10.1. Positive, Negative or Uncertain
  - 17.10.2. Interpretation of Data in the Clinical Context
    - 17.10.2.1. Statistics and Probability
  - 17.10.3. Quality Control
    - 17.10.3.1. Protocols
  - 17.10.4. Pathologists in the Breast Unit
    - 17.10.4.1. Difficult Cases: are tumors, occult primary, non-breast OSNA, very long monitoring processes
  - 17.10.5. Conclusions

## Module 18. Functional Anatomy

- 18.1. Radiological Anatomy of the Mammary Region
- 18.2. Radiological Anatomy of the Donor Regions in Reconstructive Breast Surgery
- 18.3. Surgical Anatomy in Oncology and Reconstructive Surgery Topography, Anatomic Relations
- 18.4. Muscular Surroundings
- 18.5. Arterial and Venous Vascularization
  - 18.5.1. Key Points of Vascularization in the Conservation of Skin and Areola
  - 18.5.2. Key Points of Vascularization in the Muscular Preservation and Local Flaps
- 18.6. Lymphatic Drainage
- 18.7. Innervation

- 18.8. Axillary Cavity
  - 18.8.1. Limits
  - 18.8.2. Vascular Content
  - 18.8.3. Nerve Content
  - 18.8.4. Ganglionic Content, Berg Levels, Surgical Approaches to the Axilla
- 18.9. Internal Mammary Role in Free Flaps
- 18.10. Supraclavicular Region

### Module 19. Embriology, Malformations, Intersexual States

- 19.1. Embryology
- 19.2. Physiology
- 19.3. Mammary malformations
  - 19.3.1. Polymastia
  - 19.3.2. Muscle Abnormalities and Agenesis Poland Syndrome
  - 19.3.3. Tubular Breasts
  - 19.3.4. Alterations of the Nipple-areola Complex
- 19.4. Macromastia and Micromastia
- 19.5. Gynecomastia
- 19.6. Intersexual Syndromes
- 19.7. Breast Cancer in Childhood and Adolescence:
  - 19.7.1. Environmental Causes
  - 19.7.2. Genetic Causes
- 19.8. Inflammatory Disease
  - 19.8.1. Acute Mastitis Abscess
  - 19.8.2. Chronic Mastitis
  - 19.8.3. Mondor Disease
  - 19.8.4. Plasmatic Cell Mastitis
  - 19.8.5. Periductal Mastitis
- 19.9. Systemic
  - 19.9.1. Sarcoidosis
  - 19.9.2. Granulomatosis
- 19.10. Burns in the Mammary Area in Childhood and Adolescence

### Module 20. Locoregional Surgical Treatment in Malignant Breast Pathology

- 20.1. Role of Locoregional Treatment within a Patient-Based Multimodal Effort
  - 20.1.1. Pre-Therapeutic Diagnostic Assessment and Strategy
  - 20.1.2. Importance of Neoadjuvant Therapy
  - 20.1.3. Importance of Inflammation: Healing Reaction
  - 20.1.4. R0 Resection, Residual Disease and Therapeutic Consolidation Surgical
  - 20.1.5. Pre and Perioperative Care
    - 20.1.5.1. Antibiotic Prophylaxis
    - 20.1.5.2. Thromboembolic Prophylaxis
    - 20.1.5.3. MRSA Screening
    - 20.1.5.4. Position in the Operating Room
    - 20.1.5.5. Locoregional Analgesia
    - 20.1.5.6. Nursing Care
  - 20.1.6. Types of Surgical Procedure in Breast Cancer Selection Criteria
- 20.2. Conservative Breast Surgery: Fundamentals and Lumpectomy
  - 20.2.1. Indications
  - 20.2.2. Oncologic Principles
  - 20.2.3. Plastic Principles
  - 20.2.4. Guided Surgery
    - 20.2.4.1. Wire
    - 20.2.4.2. Markers
    - 20.2.4.3. Isotopic (ROLL)
    - 20.2.4.4. Seeds
  - 20.2.5. Tumorectomy
    - 20.2.5.1. Lymph Node Involvement
    - 20.2.5.2. Incisions
    - 20.2.5.3. Drainages

- 20.3. Conservative Breast Surgery: Oncoplastic Surgery
  - 20.3.1. Foundations, Pioneers and History
  - 20.3.2. Oncoplastic Procedures Quadrant by Quadrant
  - 20.3.3. Oncoplastic Procedures Divided into Central Breast, Mid Breast; Social Breast and Peripheral Breast
  - 20.3.4. Tubular Breasts and Breast Cancer
- 20.4. Reduction Mamoplasties and Breast Cancer
  - 20.4.1. Indications
  - 20.4.2. Types
- 20.5. Reduction Mammoplasties Quadrant by Quadrant
  - 20.5.1. Contralateral Breast Symmetrization Mammoplasty
- 20.6. Mastectomy
  - 20.6.1. Modified Radical Mastectomy Current Status
    - 20.6.1.1. Description of the Modified Radical Mastectomy in the Current Day: Indications and Alternatives
    - 20.6.1.2. Other Radical Mastectomies
  - 20.6.2. Skin and CAP Conservative Mastectomy
  - 20.6.3. Skin-Sparing Mastectomy
  - 20.6.4. Reconstructive Aspects of Conservative Mastectomies
    - 20.6.4.1. Prosthesis, Meshes and Matrices
    - 20.6.4.2. Autologous Tissues
    - 20.6.4.3. Immediate Reconstruction - Deferred
- 20.7. Stage IV Surgery, Recurrence and Metastases
  - 20.7.1. When and How to Operate on a Metstatic Breast Cancer
  - 20.7.2. Role of Surgery in Locoregional Recurrence, Within a Multidisciplinary Effort
  - 20.7.3. Role of Surgery in Locoregional Palliation Within a Multidisciplinary Effort
  - 20.7.4. Surgery in Locally Advanced Cancer
  - 20.7.5. Electrochemotherapy
- 20.8. Lymphatic Surgery in Breast Cancer Significance and Importance
  - 20.8.1. Importance of Preoperative Axillary Diagnosis and Marking
- 20.9. Selective Sentinel Node Biopsy
- 20.10. Surgical Management of the Axilla Postneoadjuvancy

## Module 21. Plastic and Reconstructive Surgery

- 21.1. Augmentation Mammoplasty
  - 21.1.1. In Benign Pathology
  - 21.1.2. In Symmetrization Augmentation Mammoplasty vs. Contralateral Glandectomy and Reconstruction
  - 21.1.3. In Reparation of Sequelae of Conservative Surgery Local Flaps
- 21.2. Reduction Mammoplasty and Mastopexy
- 21.3. Breast Reconstruction: Immediate, Deferred and Immediate-Deferred
  - 21.3.1. Radiological and Surgical Anatomy of the Breast Reconstruction
  - 21.3.2. Preoperative Vascular Map
- 21.4. Prosthetic Reconstruction: Indications, Modes and Techniques
- 21.5. Pedicled Autologous Flaps
  - 21.5.1. Local: Thoracodorsal Flap
  - 21.5.2. Distance Broad Dorsal
    - 21.5.2.1. TRAM Flap
- 21.6. Free Autologous Flaps
  - 21.6.1. DIEP
  - 21.6.2. Gracilis
  - 21.6.3. Glute
  - 21.6.4. Miscellaneous
  - 21.6.5. CAP Reconstruction. Postoperative Management of Reconstructive Surgery
- 21.7. Sequelae Surgery
- 21.8. Sequelae of Conservative Breast Surgery and its Treatment
- 21.9. Scar Management
- 21.10. Lymphedema Surgery
  - 21.10.1. Axillary Reverse Map
  - 21.10.2. Surgical Management of Established Lymphedema

## Module 22. Systemic Therapy in Breast Cancer

- 22.1. Cellular Cycle, Oncogenesis and Pharmacogenomics in Breast Cancer
  - 22.2. Pharmokinetics and Tumor Response
  - 22.3. Hormone Therapy
    - 22.3.1. Basics of Hormone Therapy
    - 22.3.2. Drugs Used
      - 22.3.2.1. Selective Estrogen Receptor Modulators
      - 22.3.2.2. GnRH Analogs
      - 22.3.2.3. Aromatase Inhibitors
      - 22.3.2.4. Antiestrogens
      - 22.3.2.5. Antiprogestorens
      - 22.3.2.6. Antiandrógenos
    - 22.3.3. Prophylactic
      - 22.3.3.1. Indications
      - 22.3.3.2. Drugs Used
        - 22.3.3.2.1. Tamoxifen
        - 22.3.3.2.2. Raloxifen
        - 22.3.3.2.3. Others
          - 22.3.3.2.3.1. Retinoids
          - 22.3.3.2.3.2. Cyclooxygenase Inhibitors
          - 22.3.3.2.3.3. Phytoestrogens
          - 22.3.3.2.3.4. Statins
          - 22.3.3.2.3.5. Tibolone
          - 22.3.3.2.3.6. LHRH Analogs
          - 22.3.3.2.3.7. Bisphosphonates
          - 22.3.3.2.3.8. Calcium
          - 22.3.3.2.3.9. Selenium
          - 22.3.3.2.3.10. Vitamin D and E
          - 22.3.3.2.3.11. Lapatinib
          - 22.3.3.2.3.12. Metformina
    - 22.3.4. Adjuvant
      - 22.3.4.1. Indications
      - 22.3.4.2. Duration
        - 22.3.4.2.1. Early Disease
          - 22.3.4.2.1.1. Tamoxifen
          - 22.3.4.2.1.2. Aromatase Inhibitors
          - 22.3.4.2.1.3. LHRH Analogs
        - 22.3.4.2.2. Advanced Disease
          - 22.3.4.2.2.1. Tamoxifen
          - 22.3.4.2.2.2. Aromatase Inhibitors
          - 22.3.4.2.2.3. LHRH Analogs and Surgical Castration
          - 22.3.4.2.2.4. Cyclin 4-6 Inhibitors
  - 22.3.5. Neoadjuvant
    - 22.3.5.1. Indications
    - 22.3.5.2. Schemes
    - 22.3.5.3. Duration
- 22.4. Chemotherapy General Concepts
  - 22.4.1. Basics of Chemotherapy
    - 22.4.1.1. Importance of Dosis
    - 22.4.1.2. Resistance to Chemotherapy
  - 22.4.2. Drugs Used
- 22.5. First Line
  - 22.5.1. Anthracyclines
  - 22.5.2. Taxanes
  - 22.5.3. Paclitaxel
  - 22.5.4. Nab-Paclitaxel
  - 22.5.5. Docetaxel
  - 22.5.6. Others
    - 22.5.6.1. Other Lines
- 22.6. Adjuvant
  - 22.6.1. Early Disease
    - 22.6.1.1. Schemes
  - 22.6.2. Advanced Disease
    - 22.6.2.1. Indications
    - 22.6.2.2. Schemes
  - 22.6.3. Neoadjuvant
    - 22.6.3.1. Indications and Outlines

- 22.7. Target Therapies
  - 22.7.1. Drugs Used
    - 22.7.1.1. Anti Her2
    - 22.7.1.2. Anti Angiogenics
    - 22.7.1.3. mTor Inhibitors
    - 22.7.1.4. Cyclin Inhibitor
    - 22.7.1.5. Tirosin Kinasa Inhibitor
  - 22.7.2. Adjuvant
    - 22.7.2.1. Indications
    - 22.7.2.2. Schemes
  - 22.7.3. Neoadjuvant
    - 22.7.3.1. Indications
    - 22.7.3.2. Schemes
- 22.8. Immunotherapy
- 22.9. Support Therapies
  - 22.9.1. Colony Stimulators
  - 22.9.2. Antiemetics
  - 22.9.3. Heart Protectors
  - 22.9.4. Anti-alopecia
- 22.10. Complications
  - 22.10.1. Infection in the Neutropenic Patient
  - 22.10.2. Fungal and Viral Infections in Patients During Chemotherapy
  - 22.10.3. Endocrine and Metabolic Complications in Patients During Chemotherapy
  - 22.10.4. Emergency Oncology

## Module 23. Radiotherapy

- 23.1. Basis of Radiotherapy
  - 23.1.1. Radiobiology
  - 23.1.2. Immunotherapy
- 23.2. Indications of Radiotherapy Treatment in the Breast
  - 23.2.1. Radiotherapy after Conservative Treatment
  - 23.2.2. Radiotherapy after Mastectomy
  - 23.2.3. Radiation Therapy After Neoadjuvant Chemotherapy
  - 23.2.4. Radiotherapy on Ganglionic Chains

- 23.3. Fractionation in Breast Cancer
  - 23.3.1. Normofractionation
  - 23.3.2. Hypofractionation
- 23.4. New Techniques
  - 23.4.1. Partial Breast Irradiation: IORT, SBRT, External Beam Radiation Therapy
- 23.5. Radiotherapy in E IV patients: Oligometastatic Disease Palliative Radiotherapy
- 23.6. Reirradiation in Breast Cancer Radioprophylaxis Radiation Induced Breast Neoplasms
- 23.7. Radiotherapy and Quality of Life
  - 23.7.1. Toxicity
  - 23.7.2. Life Habits During Radiotherapy Treatment
- 23.8. Surgery Coordinated with Radiotherapy: Advantages

## Module 24. Precision Oncology and Breast Cancer

- 24.1. Genomic Phenomena in the Progression of Breast Cancer
- 24.2. Genome, Transcriptome, Proteinome
- 24.3. Epigenetics
- 24.4. Germinal Line
- 24.5. Somatic Line
- 24.6. Fluid Biopsy
- 24.7. Risk signatures
- 24.8. Poor Responders
- 24.9. Relapse
- 24.10. Future



*Develops solid skills through the use of real clinical cases, promoting clinical practice-based decision making”*

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 Advanced Master's Degree in Integrative Gynecologic Oncology guarantees students, in addition to the most rigorous and up-to-date education, access to a Advanced Master's Degree diploma issued by TECH Technological University.





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

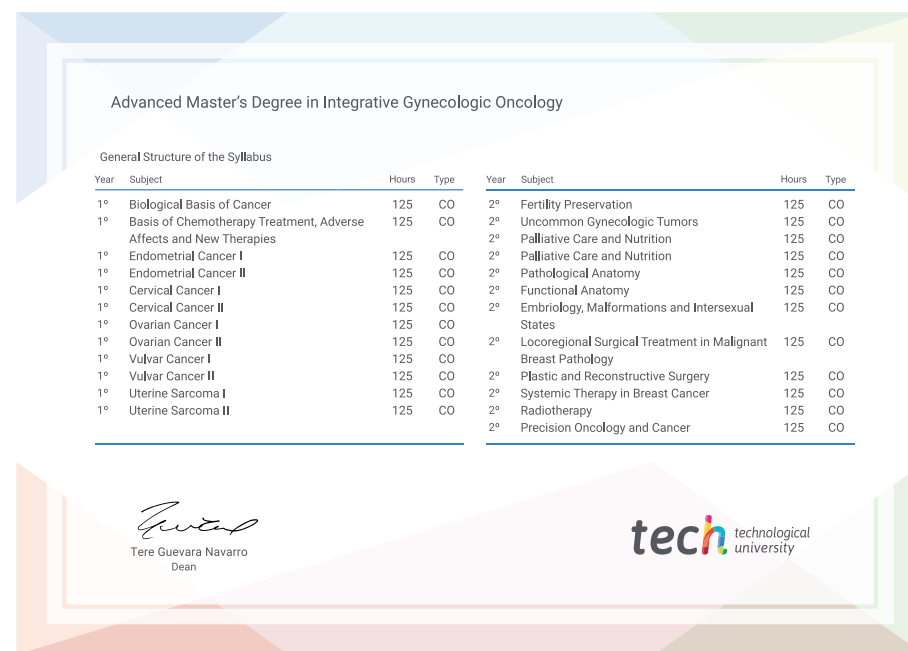
This **TECH Advanced Master's Degree in Integrative Gynecologic Oncology** contains the most complete and up-to-date scientific program on the market.

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

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

Title: **Advanced Master's Degree in Integrative Gynecologic Oncology**

Official N° of hours: **3,000 h.**



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

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



## Advanced Master's Degree Integrative Gynecologic Oncology

- » Modality: online
- » Duration: 2 years
- » Certificate: TECH Technological University
- » Schedule: at your own pace
- » Exams: online

# Advanced Master's Degree Integrative Gynecologic Oncology

