

# Professional Master's Degree

## Lower Genital Tract Pathology and HPV





## Professional Master's Degree Lower Genital Tract Pathology and HPV

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/professional-master-degree/master-lower-genital-tract-pathology-hpv](http://www.techtute.com/us/medicine/professional-master-degree/master-lower-genital-tract-pathology-hpv)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Skills

---

*p. 14*

04

Course Management

---

*p. 18*

05

Structure and Content

---

*p. 24*

06

Methodology

---

*p. 36*

07

Certificate

---

*p. 44*

# 01

# Introduction

Gynecological check-ups, Pap smears, information on sexually transmitted diseases and DNA screening for human papillomavirus (HPV) remain the main tools available to healthcare and DNA screening for human papillomavirus remain the main tools available to healthcare professionals for the prevention and early detection of cervical cancer caused by HPV.

However, recent advances have made it possible for medical professionals, or women themselves are able to take a sample from the cervical-vaginal area using a device, resulting in a diagnosis that allows cervical cancer to be prevented. This is why this 100% online program offers, through innovative multimedia content, the most exhaustive knowledge of intraepithelial neoplasia, vaccines or pathological findings by colposcopy.



A microscopic view of cells, featuring several large, textured purple spheres in the foreground and background, and several smaller, glowing red and orange spheres in the background. The background is a bright cyan color.

“

*Thanks to this Professional Master's Degree, you will learn about the most advanced studies and research on cervical cancer and HPV”*

The human papillomavirus is behind many cancers of the cervix, vagina, vulva, penis, anus, rectum and oropharynx. Among them, cervical cancer, is especially worrying as one of the leading neoplasms to cause death in women around the world, especially in underdeveloped countries.

Nevertheless, medical professionals have contributed through their daily communication and practice to curb the spread of HPV, while scientific studies have improved tests and diagnostic technology. This Professional Master's Degree offers an intensive and advanced update of knowledge thanks to the specialized teaching team on the program and the comprehensive syllabus that deals in depth with such essential elements as screening and the most recent and effective treatments for human papillomavirus.

A program with a theoretical-practical approach that allows students to delve into the pathogenesis of HPV, the immune response, the effect of human papillomavirus in the anus, perianal and external genitalia, as well as the psychological impact it has on the person affected by this pathology.

In this way, professionals will have at their disposal 10 complete Masterclasses designed by a teacher with extensive experience in the field of Gynecologic Oncology and with great international prestige. With this, graduates will update their clinical practice in the diagnosis and treatment of Gynecologic Cancer, thanks to the exclusive teaching materials that are at the forefront of technology and education.

TECH thereby offers an excellent opportunity for professionals who wish to update their knowledge through a convenient and flexible teaching format. Students only need an electronic device to be able to connect at any time to the virtual campus where syllabus is hosted from day one. All of this, without attendance or classes with fixed schedules.

This **Professional Master's Degree in Lower Genital Tract Pathology and HPV** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Lower Genital Tract Pathology and HPV
- ♦ The graphic, schematic and practical contents with which it is conceived provide scientific and practical information on those disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Get up to date with TECH and learn more about the latest scientific findings in Gynecologic Cancer, thanks to 10 exclusive Masterclasses"*

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*The multimedia content of this program will take you in a visual and flexible way through the progress made in the approach to the patient suffering from cervical cancer”*

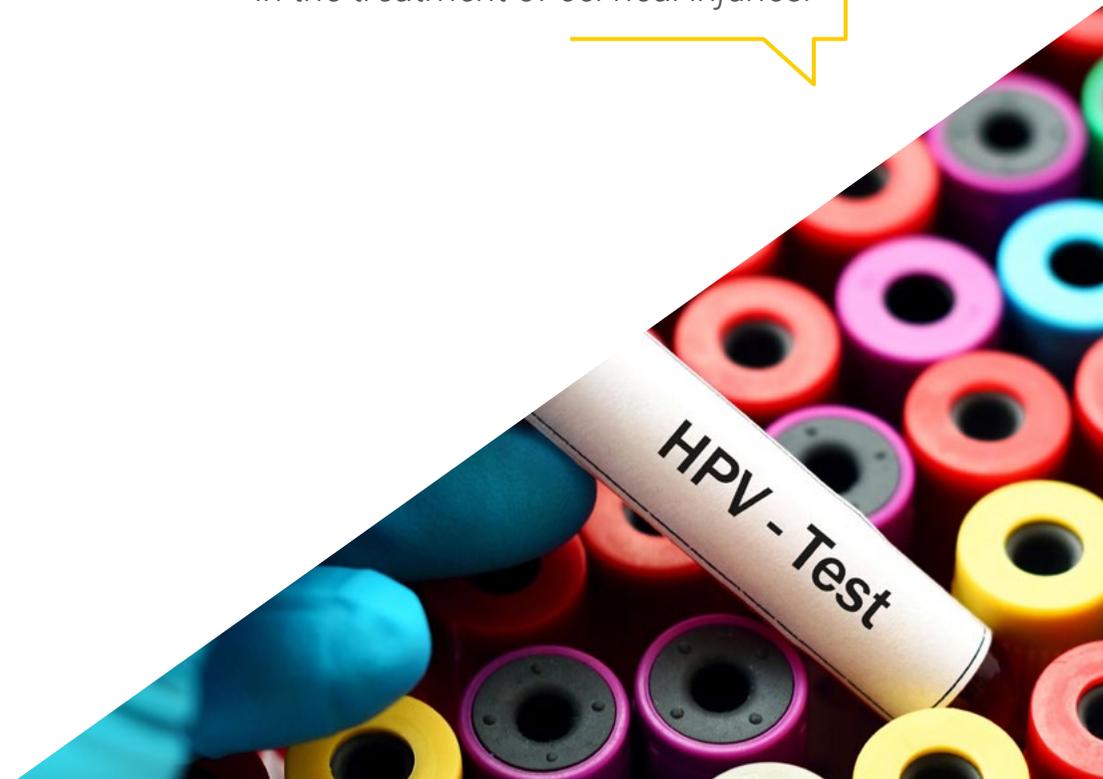
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to prepare for real situations.

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

*This Professional Master's Degree provides you with recent information, flexibility and freedom to study at your own pace.*

*This higher education program provides you with the highest scientific rigor in the latest therapies in the treatment of cervical injuries.*



# 02 Objectives

When designing this Professional Master's Degree, TECH has taken into account the importance of having updated medical professionals in the field of human papilloma virus and lower genital tract pathologies. Therefore, at the end of this program, students will be up to date with the latest advances in screening techniques and the latest developments and controversies in the current treatment of cervical cancer. Students will find it easier to accomplish this task thanks to the Relearning system, used by this institution to facilitate the educational experience.



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*Through a flexible university program,  
TECH provides you with the most recent  
vision on cervical cancer”*



## General Objectives

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- ♦ Gain a broad understanding of HPV infections and the burden the disease generates
- ♦ Understand the natural history of HPV infection, the biological behavior of the virus and the development of associated lesions
- ♦ Perform a correct evaluation of the screening, diagnosis and management of lesions caused by HPV, as well as learning how to identify them through a colposcopy.
- ♦ Know the current strategies for primary and secondary prevention, as well as tertiary prevention associated with the development of vaccine treatments
- ♦ Gain a wide vision of the different areas that HPV can affect and how to deal with them from a practical and effective point of view in daily clinical practice
- ♦ Know the latest information and controversies of current treatment in cervical cancer.
- ♦ Learn how to deal with female patients affected by HPV and their partners, at both the psychological and sexual levels



*You will successfully keep up to date with the latest concepts on immunosenescence in elderly women”*





## Specific Objectives

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### **Module 1. Pathogenesis of HPV and Immune Response: Intraepithelial Neoplasia.**

- ♦ Study the dissemination routes of the virus and its transmission
- ♦ Analyze how the immune system clears the virus
- ♦ Understand how HPV evades the host immune system
- ♦ Study the role of vaginal microbiota in the acquisition, progression and development of HPV.
- ♦ Understand how intraepithelial neoplasms develops through viral infection
- ♦ Study how cancer or even relapse can develop from intraepithelial neoplasia.
- ♦ Know the terminology associated with HPV lesions and its international consensus through the LAST project and its terminology

### **Module 2. The Human Papillomavirus: Characteristics and Epidemiology**

- ♦ Learn the structure of the HPV genome and their specific proteins.
- ♦ Know the different viral genotypes and their different biological action
- ♦ Analyze the different techniques for detecting the virus.
- ♦ Study the clinical applications of the different techniques.
- ♦ Analyze the prevalence of HPV according to population and age.
- ♦ Analyze the population variations of HPV and the burden the disease generated

### **Module 3. Primary Prevention: Preventative Vaccines for Cervical Cancer**

- ♦ Study the types of preventative vaccines for VPH and their differences.
- ♦ Analyze the immunogenicity, efficacy and effectiveness of each vaccine
- ♦ Study the effect of preventative vaccines in special populations such in those with AIDS and immunosuppressed conditions
- ♦ Study the affects of vaccines in situations not represented in the initial clinical trials, such as the elderly, women who have undergone conization and males

#### Module 4. Cervical Cancer Screening

- ♦ Analyze the secondary prevention of cervical cancer and its consequences on the population.
- ♦ Study the types of current screening.
- ♦ Analyze the best and most cost-effective screening for the Spanish population. BORRAR
- ♦ Understand the new strategies designed for population screening.
- ♦ Analyze the different screening techniques, especially those which have viral detection as their basis
- ♦ Analyze the use of biomarkers in screening.
- ♦ Compare and identify the improvements and difficulties of the different screening systems that currently exist.
- ♦ Analyze screening in the current medical landscape

#### Module 5. Dealing with Abnormal Screening Results

- ♦ Analyze the management of abnormal screening results and their integration into daily clinical practice.
- ♦ Know the diagnostic techniques available for designing a plan of action in the case of abnormal results.
- ♦ Take a comprehensive view between pathology management and the interaction between the bacterial environment of the vagina and HPV.
- ♦ Analyze the different existing therapies in the treatment of cervical lesions.
- ♦ Have a practical vision in order to gain in-depth knowledge of how to handle the guidelines and protocols published by our scientific societies.

#### Module 6. Colposcopy

- ♦ Analyze colposcopy terminology according to the latest classification provided by the American Association of Cervical Pathology and Colposcopy, as well as the latest information available
- ♦ Study and compare various images of colposcopy, vaginoscopy and vulvoscopy.
- ♦ Study the differences in the images and terminology in special situations such as pregnancy.

#### Module 7. Therapeutic Vaccines for Cervical Cancer

- ♦ Understand the biological effect and purpose of therapeutic vaccines.
- ♦ Analyze the “target” viral points which serve as a *bullseye* for vaccines.
- ♦ Learn how to design vaccine treatment and which types of vaccines are being tested
- ♦ Analyze phase II vaccines against low and high grade lesions.
- ♦ Analyze the effect of immunotherapy against cervical cancer.
- ♦ Have a vision of the future of HPV infections and their possible solutions using the immune system

#### Module 8. Effect of HPV on the Anus and Perianal Area

- ♦ Study the effect of HPV on the anus and perianal area, analyzing the burden of diseases produced by HPV
- ♦ Study the natural history of HPV infection in the anus, as well as the development of associated lesions and their evolution.
- ♦ Analyze how to screen for these lesions, which population is appropriate and with which techniques
- ♦ Study images of anal and perianal lesions caused by HPV and their classification.
- ♦ Study how to manage preneoplastic and neoplastic anal lesions and their repercussions

**Module 9. Effect of HPV on the Oropharynx**

- ♦ Study the effect of HPV on the oral cavity and larynx, analyzing the burden of diseases produced by HPV in this zone.
- ♦ Study the natural history of HPV infection in the oropharynx, as well as the development of associated lesions and their evolution.
- ♦ Analyze how to screen for these lesions, which population is appropriate and with which techniques
- ♦ Study images of HPV lesions in the oral cavity, pharynx and larynx
- ♦ Study how to manage preneoplastic and neoplastic oropharynx lesions and their repercussions

**Module 10. Effect of HPV on the External Genitals**

- ♦ Study images of the lesions produced in the external genitals of both men and women
- ♦ Analyze the burden of disease and the prevalence of condylomas.
- ♦ Study how to diagnose and manage condylomas and intraepithelial neoplasms both in women and men by following clinical guidelines
- ♦ Study the premalignant and malignant lesions in the external genitals, the differential diagnosis and the management both in men and women.

**Module 11. Cervical Cancer (CC)**

- ♦ Analyze the current management of the invasive cervical pathology, its diagnosis and management according to the current clinical practice guidelines.
- ♦ Study the most innovative surgical approaches such as robotic surgery and the use of detection techniques on the sentinel lymph node.
- ♦ Analyze the available evidence in the different approaches and treatment techniques for protecting the fertility of young women with cervical cancer.
- ♦ Visualize and analyze the different alternatives in locally advanced cases and the management of tumors >2 cm.

**Module 12. Psychological Impact of HPV Infection**

- ♦ Analyze the psychosocial impact of HPV diagnosis, not only in terms of the lesions, but the mere presence of the virus
- ♦ Study the psychological impact of the presence of the virus on women and their partners, and the subsequent repercussions on the couple's relationship and sexuality
- ♦ Implement criteria of care in couple therapy and know how to comprehensively treat patients beyond clinical management
- ♦ Study the circumstances in which women with HPV infections want to get pregnant and the repercussions of this.

**Module 13. Special Conditions in HPV Infection**

- ♦ Review the different conditions which appear in HPV infections, with special emphasis on gestation and immunosuppression.
- ♦ Assess the differences in the screening and management protocols
- ♦ Analyze skin infections and other uncommon infections related to HPV.
- ♦ Study the vertical transmission and neonatal infection following birth in women with HPV
- ♦ Analyze the relationship between HPV and other sexually transmitted diseases and how to manage their co-existence.

# 03 Skills

The syllabus for this higher education program will enhance the main competencies and skills of those medical professionals who take this program over the course of 12 months. This is made possible thanks to the multimedia resources, especially the detailed videos and the clinical cases provided by the teaching team. A comprehensive, but at the same time practical overview of the main pathologies of the lower genital tract and HPV, which will result in a complete update of knowledge in this field.





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*This program will enable you to enhance your skills in the detection of viral reactivations in advancing age”*



## General Skills

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- ♦ Get to know the current situation of HPV infection in the world.
- ♦ Improve patient attitude toward the pathology
- ♦ Establish precise diagnoses of the disease, increasing clinical performance
- ♦ Understand the social significance of HPV infection.
- ♦ Achieve a comprehensive vision of the HPV patient to improve the treatment process
- ♦ Improve the attitude toward making decisions on cancer treatment associated with HPV
- ♦ Humanize the relationship with the couple affected by HPV.
- ♦ Learn how HPV interacts with the host and how the immune system contributes to viral clearance and resolution of the HPV-associated lesion
- ♦ Analyze the novel and highly current concepts of immunosenescence as a woman's age progresses
- ♦ Understand how viral reactivation occurs in advancing age
- ♦ Study the concept of viral persistence, as well as those of quiescence and recurrence of HPV infection
- ♦ Analyze the difference between external reinfections and viral recurrences due to reactivations within the same host
- ♦ Analyze the presence of multiple infections and the impact they have on the clinical manifestations of the infection





## Specific Skills

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- ♦ Learn how HPV is constituted
- ♦ Know the different viral genotypes and their different biological action
- ♦ Analyze the effect of the immune system, so far the only possible means of clearing the virus
- ♦ Understand how HPV behaves when infecting a human cell, how it tries to evade the immune system and how it can develop neoplasms
- ♦ Study the role of the vaginal microbiota in the acquisition, progression and development of HPV in the genital tract
- ♦ Learn how intraepithelial neoplasms can develop following viral infection, to subsequently either trigger cancer or even regress
- ♦ Study the use of vaccines in special populations such in those with AIDS e immunosuppressed people
- ♦ Analyze the use of vaccines in situations not represented in initial clinical trials, such as elderly women or those who have undergone castration and males
- ♦ Analyze secondary prevention in cervical cancer
- ♦ Acquire a vision of the future of HPV infections and their possible solutions using the immune system
- ♦ Study the effect of HPV in the anus and, by analyzing the burden of disease caused by HPV in this area
- ♦ Analyze how to screen for these lesions, which population is appropriate and with which techniques
- ♦ Study how to manage preneoplastic and neoplastic anal lesions and their repercussions
- ♦ Study the effect of HPV on the oral cavity and larynx, analyzing the burden of diseases produced by HPV in this zone.
- ♦ Know the natural history of HPV infection in the oropharynx, as well as the development of associated lesions and their evolution
- ♦ Analyze the psychological impact of the presence of the virus on the woman and her partner, and the repercussions it has on the couple's relationship and sexuality
- ♦ Implement criteria of care in couple therapy and know how to comprehensively treat patients beyond clinical management protocols
- ♦ Study the circumstances in which women with HPV infections want to get pregnant and the repercussions of this.
- ♦ Know special situations that shape the evolution of the process and the management of HPV, with special emphasis on pregnancy and immunosuppression
- ♦ Analyze HPV-related skin and uncommon infections, as well as neonatal infections resulting from childbirth



*With this higher education, you will be aware of the main techniques used to manage pregnant patients with HPV”*

# 04

# Course Management

This Professional Master's Degree is directed by professionals specialized and versed in the field of Obstetrics, Gynecology and women's health. Their extensive professional experience in leading centers where they have treated pathologies of the lower genital tract and HPV has been key to their inclusion on the program. Furthermore, TECH has taken into account their human quality, which will allow them to connect and get closer to medical professionals who undertake this educational program.



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*TECH provides you with the most specialized teaching team in HPV. Thanks to them, you will get the update you are looking for”*

## International Guest Director

Honored twice by Phoenix Magazine with the *Top Doctor* award in 2021 and 2022, Dr. Dana Meredith Chase, has become an international figure of reference in the field of **Gynecologic Oncology**. These awards are the result of her great clinical work in healthcare settings such as the **Arizona Center for Cancer Care** and **St. Joseph's Hospital and Medical Center**.

As a specialist, she has dedicated her career to the diagnosis and treatment of Gynecologic Cancer and has performed more than 1,500 robotic surgeries. Accordingly, as a surgeon in this area, she has become an expert in the use of techniques and tools for **Minimally Invasive Gynecologic Surgeries**.

Dr. Chase also stands out in the field of **Medical Research**, having participated in several clinical trials. Specifically, she has a special interest in chemotherapy for **ovarian, cervical and/or uterine cancers**, so she has focused her studies on the search for new formulas to deal with resistant and recurrent cancer.

Dana Chase is also an associate professor at the **UCL School of Medicine** and a professor of **Gynecologic Oncology** at **Valleywise Medical Center**. Her passion for high-level teaching has marked much of her career, as she has also been part of the School of Medicine at **Creighton University** and the Department of Obstetrics and Gynecology at the **University of Arizona**. Not surprisingly, she is a recipient of the Teacher of the Year Award for Obstetrics and Gynecology given by St. Joseph's Hospital (2016).

As a leading specialist in her field, she has published a multitude of articles and has participated as a reviewer in different scientific publications, all of them specialized in **Gynecologic Oncology**. In addition, she frequently attends national and international congresses where she participates both as a speaker and an assistant.



## Dr. Chase, Dana Meredith

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- Researcher at the Women's Health Clinical Research Unit at UCLA
- Professor of Gynecologic Oncology at Valleywise Medical Center
- Associate Professor in the Division of Gynecologic Oncology, David Geffen School of Medicine at UCLA
- Medical Degree from the University of California
- Specialist in Obstetrics and Gynecology from the University of California
- Reviewer of scientific publications specialized in Gynecologic Oncology
- Teacher of the Year Award for Obstetrics and Gynecology, St. Joseph's Hospital
- Top Doctor Award, Phoenix Magazine
- Honor Health Physician Recognition Award for Patient Experience
- Member of NRG Oncology, Society of Gynecologic Oncology, GOG Foundation, Inc., International Gynecological Cancer Society, American Congress of Obstetricians and Gynecologists and American Society of Clinical Oncology

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

## Management



### Dr. Coronado Martín, Pluvio

- ♦ Head at the Gynecologic Oncology Unit of the San Carlos Clinical Hospital, Madrid
- ♦ Researcher specialized in Gynecology and Obstetrics
- ♦ Author of hundreds of scientific publications
- ♦ University professor in medical studies
- ♦ PhD in Medicine from the Complutense University of Madrid



### Dr. Serrano Cogollor, Luis

- ♦ Head of Cervical Pathology Unit, HM Gabinete Velázquez, Madrid
- ♦ Director of Vulvocervical Pathology at HM Gabinete Velázquez, Madrid
- ♦ Bachelor's Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Specialist in Obstetrics, Gynecology and Gynecological Tumors



# 05

# Structure and Content

The most detailed and exhaustive information on Genital Tract Pathology and HPV is in the syllabus that has been prepared by the teaching team on this Professional Master's Degree. An advanced syllabus, that will allow students to delve into the latest techniques in the detection of human papillomavirus, the treatments applied at present, and the care provided to pregnant patients with HPV or the use of vaccines for prevention. All this, complemented by specialized readings and interactive diagrams, which will help physicians to be up to date on this health area.





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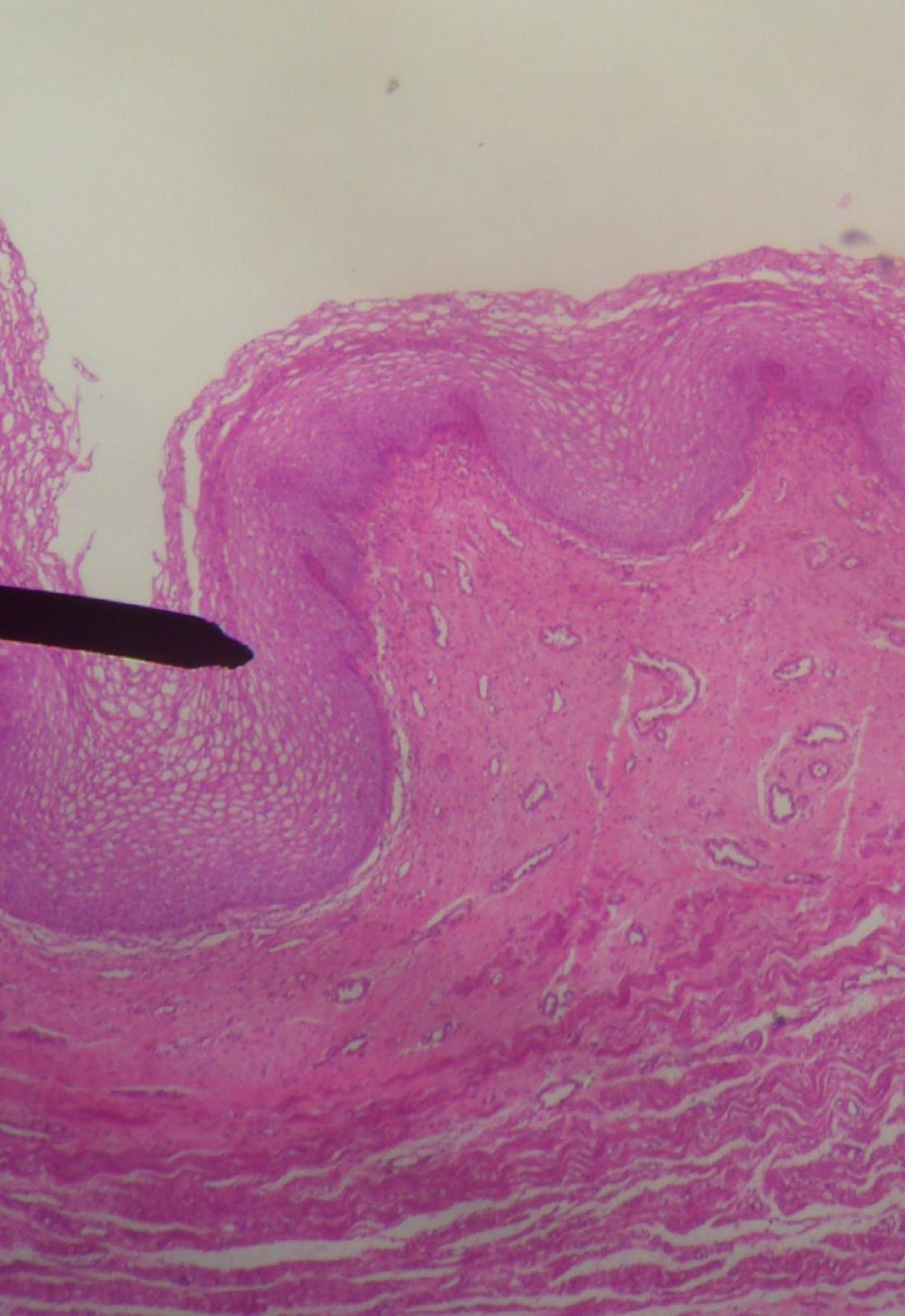
*A dynamic university program that allows you to delve into the prevalence of infection caused by the different types of HPV in the skin”*

## Module 1. Pathogenesis of HPV and Immune Response: Intraepithelial Neoplasia

- 1.1. Infection Routes
  - 1.1.1. Sexual Contact
  - 1.1.2. Objects
  - 1.1.3. In Medical Consultation
  - 1.1.4. Role of Condoms
  - 1.1.5. Vertical Transmission
  - 1.1.6. Protection of Surgeons during Vaporization
- 1.2. Effect of the Immune System on HPV
  - 1.2.1. Innate Immunity and Adaptive Immunity
  - 1.2.2. General and Local Antibody Response
  - 1.2.3. Inhibition of the Immune Response
  - 1.2.4. Cellular Immunity against the Lesion
  - 1.2.5. Immunosenescence
- 1.3. Viral Production and Genome Integration
  - 1.3.1. Difference between High and Low Risk Viruses
  - 1.3.2. Early and Late Gene Expression
  - 1.3.3. Viral Persistence and Quiescence
  - 1.3.4. Viral Clearance according to Age and Genotype
- 1.4. Role of Vaginal Microbiota
  - 1.4.1. Definition of the Status Types of Bacteria Communities
  - 1.4.2. Relationship between Lesions and Different Types of Status
  - 1.4.3. Role of Lactobacilli on Immunity
- 1.5. Development of Cervical Intraepithelial Neoplasms and Genital Warts
  - 1.5.1. Dysregulation of Cellular Mechanisms by Viral Proteins
  - 1.5.2. Progression
  - 1.5.3. Regression
  - 1.5.4. Relapse

## Module 2. The Human Papillomavirus: Characteristics and Epidemiology

- 2.1. Structure and Composition of HPV
  - 2.1.1. General Description
  - 2.1.2. Capsid
  - 2.1.3. Genome
- 2.2. Genetic Map of HPV and its Biological Functions
  - 2.2.1. Long Control Region
  - 2.2.2. Early Gene Expression
  - 2.2.3. Late Gene Expression
  - 2.2.4. Replicative Cycle
- 2.3. Genotypes and their Clinical Importance
  - 2.3.1. Concept of High and Low Risk
  - 2.3.2. Low Risk Genotypes
  - 2.3.3. High Risk Genotypes
  - 2.3.4. Geographic Variations
- 2.4. HPV Detection Techniques
  - 2.4.1. HPV Detection Techniques
  - 2.4.2. DNA-VPH Detection Technique with Hybrid Capture
  - 2.4.3. DNA-VPH Detection Technique with Partial Genotyping
  - 2.4.4. DNA-VPH Detection Technique with Complete Genotyping
  - 2.4.5. RNA Detection Techniques
  - 2.4.6. FDA Validation for Screening and Diagnosis
- 2.5. Distribution of Genotypes in the World and in Our Environment
  - 2.5.1. Epidemiology in Relation to the Burden of Disease
  - 2.5.2. Geographic Variations
  - 2.5.3. Genotype Distribution in Spain BORRAR
- 2.6. Prevalence According to Age
  - 2.6.1. In Women
  - 2.6.2. In Men



- 2.7. Disease Burden of HPV
  - 2.7.1. Pathology Associated with Genital Infection in Women (Cervix, Vagina, Vulva)
  - 2.7.2. Pathology Associated with Genital Infection in Men (Scrotum, Penis and Gland)
  - 2.7.3. Pathology Associated with Anal Infection
  - 2.7.4. Pathology Associated with Oropharynx Infection
  - 2.7.5. Pathology Associated with Other Areas

### Module 3. Primary Prevention: Preventative Vaccines for Cervical Cancer

- 3.1. Characteristics of Available Vaccines
  - 3.1.1. Divalent Vaccine
  - 3.1.2. Tetravalent Vaccine
  - 3.1.3. Nonavalent Vaccine
  - 3.1.4. New Vaccines
- 3.2. Immunogenicity
  - 3.2.1. Seroconversion and Antibody Level
  - 3.2.2. Correlation between Antibody Level and Efficacy
  - 3.2.3. Differences between the Available Vaccines and Possible Relevance
  - 3.2.4. Estimation of the Protection Duration
- 3.3. Vaccine Efficacy and Effectiveness
  - 3.3.1. Long-Term Efficacy Studies
  - 3.3.2. Medium-Term Effectiveness Studies
- 3.4. Immunization in Special Groups
  - 3.4.1. HIV+ Patients
  - 3.4.2. Transplant Recipient
  - 3.4.3. Immunosuppressed Patients
  - 3.4.4. Men
  - 3.4.5. Patients with VPH Lesions and/or Treated Patients
- 3.5. Safety of the Vaccine against HPV
  - 3.5.1. Safety Profile
  - 3.5.2. Most Frequent Adverse Events
  - 3.5.3. Pharmacovigilance
- 3.6. Current Status of Vaccination in the World
  - 3.6.1. Worldwide Vaccine Coverage
  - 3.6.2. Vaccine Coverage in Spain BORRAR
  - 3.6.3. Perspectives of Eradicating the Burden of Disease

## Module 4. Cervical Cancer Screening

- 4.1. Screening
  - 4.1.1. Concept
  - 4.1.2. Need, Benefits and Limitations
  - 4.1.3. Population Screening
  - 4.1.4. Opportunist Screening
  - 4.1.5. Health Care Screening
- 4.2. Cytology in Screening
  - 4.2.1. Conventional Cytology
  - 4.2.2. Liquid-Based Cytology
  - 4.2.3. Automatic Cytology
  - 4.2.4. Sensitivity and Specificity
- 4.3. HPV Test
  - 4.3.1. Evidence on the Use of VPH in Screening
  - 4.3.2. VPH as a Screening Test
    - 4.3.2.1. Efficacy as a Primary Test
    - 4.3.2.2. Efficacy as a Secondary Test
    - 4.3.2.3. Most Efficient Screening Model with HPV
  - 4.3.3. HPV Test Selection for Screening
- 4.4. Screening Strategies
  - 4.4.1. Starting Age
  - 4.4.2. Finishing Age
  - 4.4.3. Screening Women Under 35
  - 4.4.4. Screening Women Over 35
  - 4.4.5. Special Population Screening
    - 4.4.5.1. The Immunosuppressed
    - 4.4.5.2. Screening in the Era of Vaccination
  - 4.4.6. Population Screening in Spain. BORRAR Recommendations BORRAR
- 4.5. Other Complementary Techniques
  - 4.5.1. Use of Viral Genotyping
  - 4.5.2. Use of Biomarkers

- 4.6. Established Screening Systems and their Differences
  - 4.6.1. Cytology as a Primary Strategy
  - 4.6.2. VPH Test as a Primary Strategy
  - 4.6.3. Biomarkers

## Module 5. Dealing with Abnormal Screening Results

- 5.1. Action Protocols in the Event of an Abnormal Screening
  - 5.1.1. Positive HPV Test
  - 5.1.2. Altered Cytology
    - 5.1.2.1. Non-Satisfactory
    - 5.1.2.2. ASCUS
    - 5.1.2.3. ASC-H
    - 5.1.2.4. LSIL
    - 5.1.2.5. HSIL
    - 5.1.2.6. Atypical Cylindrical/Glandular Cells (AGC)
- 5.2. How to Establish a Correct Diagnosis?
  - 5.2.1. The Importance of Using Up-to-Date Nomenclature
  - 5.2.2. Use of Biomarkers as Characterization of Questionable Results
- 5.3. Management of Vaginal Microbiota in Treatment
  - 5.3.1. Impact of Microbiota in Lesional Evolution
  - 5.3.2. Use of Probiotics in during Monitoring
- 5.4. When to Treat and When to Continue? Management of Histological Results
  - 5.4.1. LSIL
  - 5.4.2. HSIL
  - 5.4.3. The CIN 2 Enigma
  - 5.4.4. Monitoring HSIL in Special Circumstances
- 5.5. Treatment of Cervical Lesions
  - 5.5.1. Preference for Excisional Methods
  - 5.5.2. Destructive Methods: Indications
- 5.6. Post-Treatment Monitoring
  - 5.6.1. Post-Treatment HPV Determination
  - 5.6.2. Monitoring Frequency

## Module 6. Colposcopy

- 6.1. Colposcopy Terminology
  - 6.1.1. Importance of Unified and Up-to-Date Terminology
  - 6.1.2. Rio 2011 Terminology
- 6.2. How to Perform a Colposcopy?
  - 6.2.1. Basic Concepts
  - 6.2.2. Materials
  - 6.2.3. Staining
  - 6.2.4. Description of the Different Transformation Zones
  - 6.2.5. Satisfactory Colposcopy
  - 6.2.6. Unsatisfactory and Non-Adequate Colposcopy
- 6.3. Normal Findings
  - 6.3.1. Original Squamous Epithelium
  - 6.3.2. Glandular Epithelium, Ectopia
  - 6.3.3. Squamous Metaplasia
  - 6.3.4. Deciduous Cervix
- 6.4. Low Grade Pathological Findings
  - 6.4.1. Weak Acetowhite Epithelium
  - 6.4.2. Fine Punctation
  - 6.4.3. Fine Mosaics
- 6.5. High-Grade Pathological Findings
  - 6.5.1. Strong Acetowhite Epithelium, White on White
  - 6.5.2. Coarse Punctation
  - 6.5.3. Coarse Mosaics
  - 6.5.4. Irregular Crypts
  - 6.5.5. Other Suspicious Signs of High Grade
- 6.6. Normal and Abnormal Vascularization
  - 6.6.1. Arboriform Structure Vessels
  - 6.6.2. Pathological Vessels
- 6.7. Cancer Colposcopy
  - 6.7.1. Necrosis
  - 6.7.2. Exophytic Tumor
  - 6.7.3. Bleeding Ulcers

- 6.8. Miscellaneous
  - 6.8.1. Polyps
  - 6.8.2. Leukoplakia.
  - 6.8.3. Erosions
  - 6.8.4. Iodonegativity
- 6.9. Colposcopy in Special Conditions
  - 6.9.1. Colposcopy in Pregnancy
  - 6.9.2. Colposcopy in Post-Treatment
  - 6.9.3. Colposcopy in Menopausia
- 6.10. Vulvoscopy.
  - 6.10.1. Description of the Lesion (Type, Colour and Secondary Morphology)
  - 6.10.2. Miscellaneous Findings (Traumas and Deformities)
  - 6.10.3. Malignant Suspicion (Ulcers, Exophytic Lesions, Necrosis, etc.)
  - 6.10.4. Abnormal Magnified Findings

## Module 7. Therapeutic Vaccines for Cervical Cancer

- 7.1. Biological Basis of Therapeutic Vaccines
  - 7.1.1. Concept of Therapeutic Vaccines
  - 7.1.2. Cytotoxicity Analysis of the Immune System
  - 7.1.3. Target Antigens
- 7.2. Types of Therapeutic Vaccines
  - 7.2.1. Based on Proteins and Peptides
  - 7.2.2. Based on DNA
  - 7.2.3. Based on Nanoparticles
  - 7.2.4. Based on Cells
    - 7.2.4.1. Activated Dendritic Cells
    - 7.2.4.2. Processed Tumor Cells
  - 7.2.5. Based on Bacterial Vectors and Living Viruses
- 7.3. Vaccines Against Low Grade Lesions
  - 7.3.1. Design of Vaccine Against ASUS-LSIL
  - 7.3.2. Clinical Trials and Results
  - 7.3.3. Security/Safety
- 7.4. Vaccines Against High Grade Lesions
  - 7.4.1. Design of Vaccine Against ASUS-LSIL
  - 7.4.2. Clinical Trials and Results

- 7.5. Vaccines Against Cancer
  - 7.5.1. Design of Vaccine Against ASUS-LSIL
  - 7.5.2. Clinical Trials and Results
  - 7.5.3. Immunotherapy
- 7.6. Safety of Therapeutic Vaccines
  - 7.6.1. Safety Profile
  - 7.6.2. Most Frequent Adverse Events
  - 7.6.3. Vaccine Failure
- 7.7. Future of Therapeutic Vaccines
  - 7.7.1. New Models
  - 7.7.2. New Target Antigens
  - 7.7.3. Other Ways of Stimulating the Immune System Against HPV

## Module 8. Effect of HPV on the Anus and Perianal Area

- 8.1. Epidemiology of HPV Anal Infection
  - 8.1.1. Disease Burden of HPV
  - 8.1.2. Most Common Genotypes
  - 8.1.3. Associated Precursor Lesions
  - 8.1.4. Associated Tumoral Lesions
- 8.2. Natural History of HPV Anal Infection
  - 8.2.1. Routes of Perianal Infection
  - 8.2.2. Role of Anal Intercourse. Are these Important?
  - 8.2.3. Associated Co-Factors
  - 8.2.4. Condylomas
  - 8.2.5. Viral Integration and Oncogenesis in the Anus and Perianal Area
- 8.3. Anal Intraepithelial Lesion
  - 8.3.1. Development and Topography of Anal Lesion
  - 8.3.2. Low Grade Lesions
  - 8.3.3. High Grade Lesions
- 8.4. Screening of HPV Anal Lesion
  - 8.4.1. The Role of Cytology
  - 8.4.2. The Role of HPV Determination
  - 8.4.3. Population Screening
  - 8.4.4. Screening Strategies

- 8.5. Anuscopy
  - 8.5.1. Anuscopy Technique
  - 8.5.2. Normal Anuscopy and Benign Changes
  - 8.5.3. Anuscopy with Low Grade Lesions
  - 8.5.4. Anuscopy with High Grade Lesions
  - 8.5.5. Anal Biopsy. Technique
- 8.6. Treatment of Anal and Perianal Lesion
  - 8.6.1. Concept of Anal and Perianal Lesion Treatment
  - 8.6.2. Treatment of Anal and Perianal Condylomas
  - 8.6.3. Management of Anal and Perianal Intraepithelial Lesions
  - 8.6.4. Medical Treatment
  - 8.6.5. Surgical Management
- 8.7. Anus Cancer Due to HPV
  - 8.7.1. Prevalence of Anus Cancer
  - 8.7.2. Risk Factors
  - 8.7.3. Symptoms
  - 8.7.4. Diagnostic Techniques
  - 8.7.5. Staging
  - 8.7.6. Conservative Management
  - 8.7.7. Radical Management. Anus Cancer Surgery
  - 8.7.8. Monitoring After Treatment
  - 8.7.9. Control/ Screening for VPH Infection in Other Areas

## Module 9. Effect of HPV on the Oropharynx

- 9.1. Epidemiology of HPV Oropharynx Infection
  - 9.1.1. Disease Burden of HPV
  - 9.1.2. Topography of Oropharynx Lesions
  - 9.1.3. Most Common Genotypes
  - 9.1.4. Associated Precursor Lesions
  - 9.1.5. Associated Tumoral Lesions
- 9.2. Natural History of HPV Oropharynx Infection
  - 9.2.1. Routes of Oropharynx Infection
  - 9.2.2. Role of Oral Sex
  - 9.2.3. Associated Co-Factors

- 9.2.4. Oropharynx Condylomas
- 9.2.5. Viral Integration and Oncogenesis in the Oropharynx
- 9.3. Oropharynx Intraepithelial Lesion
  - 9.3.1. Development and Topography of Oropharynx Lesion
  - 9.3.2. Low Grade Lesions
  - 9.3.3. High Grade Lesions
- 9.4. Screening of HPV Oropharynx Lesion
  - 9.4.1. Role and Technique of Cytology
  - 9.4.2. Role and Technique of HPV Determination
  - 9.4.3. Population Screening
  - 9.4.4. Screening Strategies
- 9.5. Visualization of the Types of Oropharynx Lesions Caused by HPV
  - 9.5.1. Visualization Technique
  - 9.5.2. Normal Oropharynx and Benign Changes
  - 9.5.3. Oropharynx with Low Grade Lesions
  - 9.5.4. Oropharynx with High Grade Lesions
  - 9.5.5. Oropharynx Biopsy. Technique
- 9.6. Treatment of Oropharynx Lesions
  - 9.6.1. Concept of Oropharynx Lesion Treatment
  - 9.6.2. Treatment of Oropharynx Condylomas
  - 9.6.3. Management of Oropharynx Intraepithelial Lesions
  - 9.6.4. Medical Treatment
  - 9.6.5. Surgical Management
- 9.7. Oropharynx Cancer Associated with HPV
  - 9.7.1. Prevalence of Oropharynx Cancer
  - 9.7.2. Risk Factors
  - 9.7.3. Symptoms
  - 9.7.4. Diagnostic Techniques
  - 9.7.5. Staging
  - 9.7.6. Conservative Management
  - 9.7.7. Radical Management. Anus Cancer Surgery
  - 9.7.8. Monitoring After Treatment
  - 9.7.9. Control/ Screening for VPH Infection in Other Areas

## Module 10. Effect of HPV on the External Genitals

- 10.1. Condylomas
  - 10.1.1. Epidemiology and Burden of the Disease
    - 10.1.1.1. Prevalence and Types of Vulvar Condylomas
    - 10.1.1.2. Prevalence and Types of Vaginal Condylomas
    - 10.1.1.3. Prevalence and Types of Condylomas on Male Genitals
  - 10.1.2. Condyloma Risk Factors
    - 10.1.2.1. Vulvar Condylomas
    - 10.1.2.2. Vaginal Condylomas
    - 10.1.2.3. Condylomas on Male Genitals
  - 10.1.3. Screening for Cervical Lesions in Female External Genitalia Condylomas
  - 10.1.4. Medical Treatment of Condylomas
  - 10.1.5. Surgical Management
    - 10.1.5.1. Ablative
    - 10.1.5.2. Excisional
- 10.2. Vulval Intraepithelial Neoplasia (VIN)
  - 10.2.1. Epidemiology and Burden of the Disease
  - 10.2.2. Types of VIN
  - 10.2.3. VIN Risk Factors
  - 10.2.4. VIN Screening. Is it feasible?
  - 10.2.5. VIN Management. Decision Algorithms
  - 10.2.6. Expectant Treatment
  - 10.2.7. Medical Treatment
  - 10.2.8. Surgical Management
    - 10.2.8.1. Ablative
    - 10.2.8.2. Excisional
  - 10.2.9. VIN Monitoring
  - 10.2.10. Risk of Recurrence and Malignancy of VIN
  - 10.2.11. Vulvar Cancer
- 10.3. Vaginal Intraepithelial Neoplasia
  - 10.3.1. Epidemiology and Burden of the Disease
  - 10.3.2. Types of VAIN
  - 10.3.3. VAIN Risk Factors

- 10.3.4. VAIN Screening. Is it feasible?
- 10.3.5. VAIN Management. Decision Algorithms
- 10.3.6. Expectant Treatment
- 10.3.7. Medical Treatment
- 10.3.8. Surgical Management
  - 10.3.8.1. Ablative
  - 10.3.8.2. Excisional
- 10.3.9. VAIN Monitoring
- 10.3.10. Risk of Recurrence and Malignancy of VAIN
- 10.3.11. Vagina Cancer
- 10.4. Premalignant Lesions in Male External Genitals (PIN)
  - 10.4.1. Epidemiology and Burden of the Disease
  - 10.4.2. Types of PIN
  - 10.4.3. PIN Risk Factors
  - 10.4.4. PIN Screening. Is it feasible?
  - 10.4.5. PIN Management. Decision Algorithms
  - 10.4.6. Expectant Treatment
  - 10.4.7. Medical Treatment
  - 10.4.8. Surgical Management
    - 10.4.8.1. Ablative
    - 10.4.8.2. Excisional
  - 10.4.9. PIN Monitoring
  - 10.4.10. Risk of Recurrence and Malignancy of PIN
  - 10.4.11. Penile Cancer

## Module 11. Cervical Cancer (CC)

- 11.1. Epidemiology and Risk Factors of CC Development
  - 11.1.1. Worldwide Incidence and Mortality of CC
  - 11.1.2. Incidence and Mortality of CC per Region and Country
  - 11.1.3. Incidence and Mortality of CC in Spain BORRAR
  - 11.1.4. Tobacco and CC
  - 11.1.5. Hormonal Contraception and CC
  - 11.1.6. Effect of IDU on the Incidence of CC
  - 11.1.7. Diet and CC



- 11.1.8. Sexually Transmitted Infections and Risk of CC
- 11.1.9. Parity and CC
- 11.1.10. Age of Starting Sexual Relations and Promiscuity.
- 11.1.11. Couples At-Risk. Male Circumcision and CC
- 11.2. Staging and Techniques of Extension
  - 11.2.1. Diagnosis through Biopsy or Conization
  - 11.2.2. FIGO and TNM Stages
  - 11.2.3. Transvaginal Ultrasound Assessment in the Diagnosis of Extension
  - 11.2.4. Magnetic Resonance Assessment in the Diagnosis of Extension
  - 11.2.5. Tumor Markers Assessment
  - 11.2.6. Clinical Staging vs. Post-Surgical vs. Imaging
- 11.3. Basis of CC Treatment
  - 11.3.1. Conization as a Treatment. When It Is Indicated
  - 11.3.2. Types of Radical Hysterectomy
  - 11.3.3. Complications of the Different Types of Radical Hysterectomy
  - 11.3.4. Sentinel lymph node
  - 11.3.5. Para-Aortic Lymphadenectomy
  - 11.3.6. External Radiotherapy and Brachytherapy
  - 11.3.7. Chemotherapy
- 11.4. Routes of Surgical Treatment
  - 11.4.1. Laparotomy
  - 11.4.2. Laparoscopy
  - 11.4.3. Robotics
  - 11.4.4. LACC Studies: Open vs. Minimally Invasive
- 11.5. Treatment Plans
  - 11.5.1. Decision Algorithms
  - 11.5.2. Treatment in Initial Stages
    - 11.5.2.1. Conization as a Treatment
    - 11.5.2.2. Need for Radicalism
    - 11.5.2.3. Parametrectomy in Previous Hysterectomy
  - 11.5.3. Treatment in Advanced Stages
    - 11.5.3.1. Role of Para-Aortic Lymphadenectomy
    - 11.5.3.2. Para-Aortic Lymphadenectomy Access and Routes
    - 11.5.3.3. Role of PET-CT Against Para-Aortic Lymphadenectomy
  - 11.5.4. Vaccine Therapies Against Cervical Cancer
  - 11.5.5. CCU Monitoring
- 11.6. Fertility Preservation Treatment
  - 11.6.1. Indications of Fertility Preservation
  - 11.6.2. Expectant Care After Conization
  - 11.6.3. Simple and Radical Trachelectomy
  - 11.6.4. Most Appropriate Approach of Trachelectomy
    - 11.6.4.1. Open
    - 11.6.4.2. Vaginal
    - 11.6.4.3. Laparoscopy
    - 11.6.4.4. Robotics
- 11.7. Alternative Therapies in Local Advanced CC
  - 11.7.1. Chemoradiotherapy.
  - 11.7.2. Role of New Chemotherapies
  - 11.7.3. Immunotherapy

## Module 12. Psychological Impact of HPV Infection

- 12.1. Effect of HPV on the Individual
  - 12.1.1. Response of Individual After Finding Out They Have HPV
  - 12.1.2. Physiological Reactions to HPV Infection
  - 12.1.3. Pathological Reactions to HPV Infection
  - 12.1.4. Individual Sense of Guilt
  - 12.1.5. Effect on Sexual Activity
  - 12.1.6. Management of Psychological Alterations
  - 12.1.7. Access to Information on Social Media and the Internet
  - 12.1.8. Associations Affected by HPV

- 12.2. Effect in HPV on the Partner
  - 12.2.1. Response of the Partner After Finding Out They Have HPV
  - 12.2.2. Physiological Reactions of the Partner to HPV Infection
  - 12.2.3. Pathological Reactions of the Partner to HPV Infection
  - 12.2.4. Behavior Towards Sexual Relations with the Partner
  - 12.2.5. Management of Changes in the Couple's Relationship
  - 12.2.6. Preventative Behavior of the Infection and its Repercussions on Couple Sex Life
- 12.3. Sexual Activity after HPV
  - 12.3.1. Psychological Stages after Finding Out They Have HPV
  - 12.3.2. Consequences on Sexual Behavior
  - 12.3.3. Breakup of the Couple
  - 12.3.4. When Only One in the Couple is Infected
  - 12.3.5. When Both are Infected
  - 12.3.6. Behaviors of the Infected Individual or Partner with Members of their Environment
  - 12.3.7. Sexual Orientation of the Infected Couple
- 12.4. Depression and Mood Alterations after HPV
  - 12.4.1. Prevalence of Depressive Syndromes in Those Infected with HPV
  - 12.4.2. Effect of HPV on an Individual's Depression
  - 12.4.3. Management of Depressive Syndromes Caused by HPV
  - 12.4.4. Management of Psychotic Syndromes Caused by HPV
  - 12.4.5. Management of Obsessive Syndromes Caused by HPV
- 12.5. Individual Psychological Management
  - 12.5.1. Professional Attitude Towards a Patient with HPV
  - 12.5.2. How to Explain HPV Infection?
  - 12.5.3. Cognitive-Behavioral
  - 12.5.4. Group Therapy
  - 12.5.5. Drug Therapy
- 12.6. Couple Psychological Management
  - 12.6.1. Professional Attitude Towards the Partner of a Patient with HPV
  - 12.6.2. How to Explain HPV Infection to the Partner of an HPV Patient?
  - 12.6.3. Professional Attitude Towards the Breakup of the Couple
  - 12.6.4. Couples Therapy. Reinventing Sex
  - 12.6.5. Adjuvant Drug Therapy

- 12.7. Desire to get Pregnant with HPV Infection
  - 12.7.1. Professional Attitude Towards the Desire to get Pregnant of a Patient with HPV
  - 12.7.2. Recommendations for Indicating Pregnancy
  - 12.7.3. When Pregnancy Should Be Contraindicated?
  - 12.7.4. Monitoring During the Period of Trying to Get Pregnant
  - 12.7.5. Attitude of the Partner During Pregnancy
  - 12.7.6. Psychological Alterations That Occur During the Period of Trying to Get Pregnant

## Module 13. Special Conditions in HPV Infection

- 13.1. Pregnancy
  - 13.1.1. Prevalence of HPV in Pregnant Women
  - 13.1.2. Natural History of HPV Infections in Pregnant Women
  - 13.1.3. Colposcopy during Pregnancy
  - 13.1.4. Condylomas and Pregnancy. Multiple Condylomatosis
  - 13.1.5. Control of Cervical Lesions during Pregnancy
  - 13.1.6. Transmission to the Neonatal During the Birth
  - 13.1.7. Evolution and Viral Clearance after Delivery
  - 13.1.8. Management of HPV Lesions During Pregnancy
- 13.2. Immunosuppression
  - 13.2.1. Prevalence of HPV in Immunosuppressed Patients
  - 13.2.2. Natural History of HPV Infections in Immunosuppressed Patients
  - 13.2.3. Colposcopy in Immunosuppressed Women
  - 13.2.4. Vulvar Condylomas and their Management. Multiple Condylomatosis
  - 13.2.5. Screening of HPV Cervical Lesions in Immunosuppression
  - 13.2.6. Vaccination of Immunosuppressed Patients
  - 13.2.7. Evolution of Lesions for Immunosuppressed Patients and Viral Clearance
  - 13.2.8. Management of HPV Lesions in Immunosuppressed Patients
- 13.3. AIDS
  - 13.3.1. Prevalence of HPV in AIDS
  - 13.3.2. Natural History of VPH Infections in AIDS
  - 13.3.3. Colposcopy in Women with AIDS
  - 13.3.4. Vulvar Condylomas and their Management AIDS
  - 13.3.5. Vaccination Against HPV in AIDS

- 13.3.6. Screening of HPV Cervical Lesions in AIDS
- 13.3.7. Evolution of Lesions for Immunosuppression in AIDS. Accumulative Effect of Both Viruses
- 13.3.8. Management of HPV Lesions in AIDS
- 13.4. Skin Infections From HPV
  - 13.4.1. Prevalence of Skin Infections in the Different Types of HPV
  - 13.4.2. Topography of Dermal HPV Lesions
  - 13.4.3. Natural History of VPH Infections in the Skin
  - 13.4.4. Dermal Warts of Viral Origin
  - 13.4.5. Prevention of Dermal Conditions from HPV
  - 13.4.6. Management of Dermal HPV Lesions
- 13.5. Associated Sexually Transmitted Infections
  - 13.5.1. Prevalence of STIs
  - 13.5.2. Association Between HPV and STIs
  - 13.5.3. Natural History of VPH-STI Co-Infections. Individual or Cumulative Effect
  - 13.5.4. Prevention of STIs
  - 13.5.5. Colposcopy and Vulvoscopy of STIs
  - 13.5.6. Management of STIs
- 13.6. Uncommon Infections From HPV
  - 13.6.1. Distribution of HPV Genotypes
  - 13.6.2. Tropism of HPV Genotypes
  - 13.6.3. Low Prevalence HPV-Associated Conditions
  - 13.6.4. Management of Low Prevalence HPV Lesions
- 13.7. Neonatal Infection from HPV and Recurrent Laryngeal Papillomatosis in Neonates
  - 13.7.1. Prevalence of Neonatal Conditions from HPV
  - 13.7.2. Consequences of HPV Infections in Newborns
  - 13.7.3. Management of HPV Neonatal Infection
  - 13.7.4. Recurrent Laryngeal Papillomatosis. Natural History
  - 13.7.5. Treatment of Recurrent Laryngeal Papillomatosis
- 13.8. Infections From HPV in Children
  - 13.8.1. Prevalence of Conditions from HPV in Children
  - 13.8.2. Consequences of HPV Infections in Children
  - 13.8.3. Management of HPV Infection in Children
  - 13.8.4. Legal Considerations of Infections From HPV in Children



*With a vision focused on practice, this comprehensive training approach will allow you to bring the improvements in diagnosis, treatment and prognosis of the latest methodologies in the field of HPV to your daily work”*

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. Gervas, 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

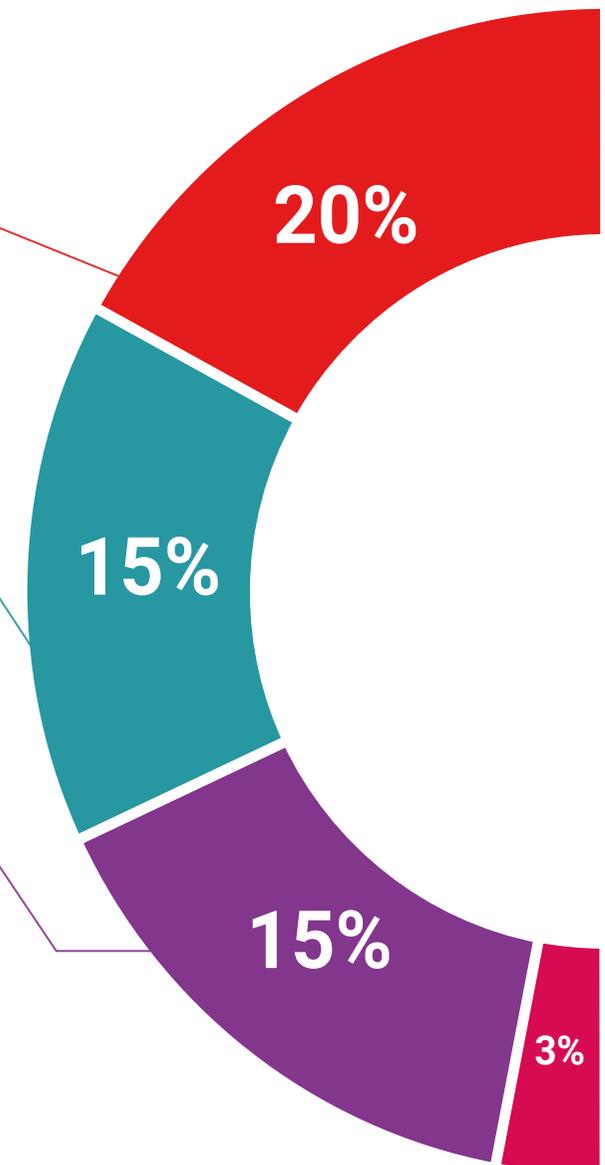
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

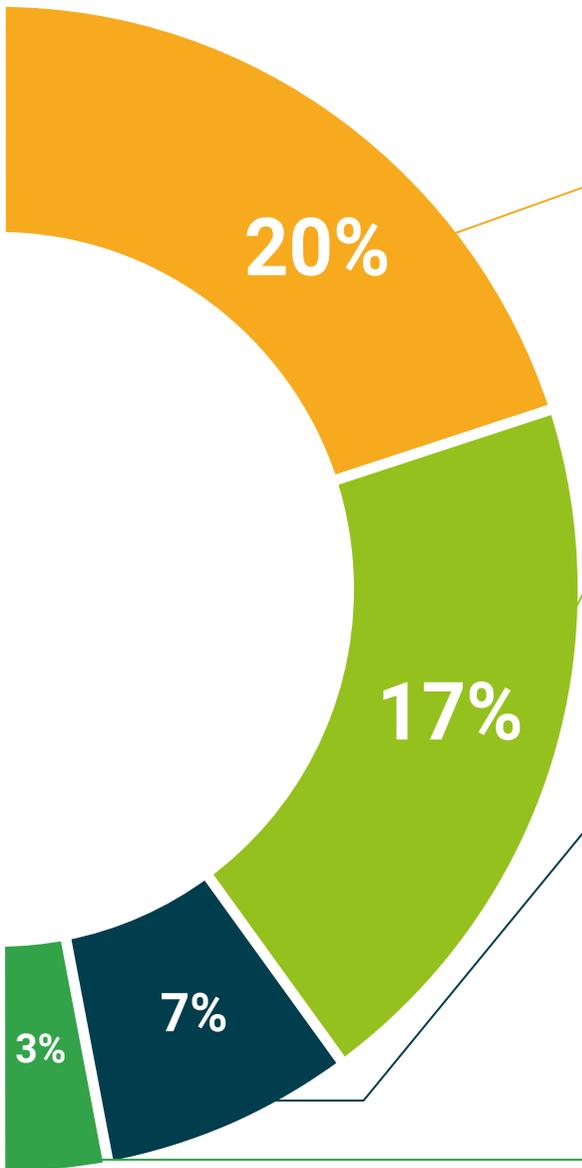
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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 Professional Master's Degree in Lower Genital Tract Pathology and HPV guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree diploma issued by TECH Technological University.



“

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

This **Professional Master's Degree in Lower Genital Tract Pathology and HPV** contains the most complete and up-to-date scientific on the market.

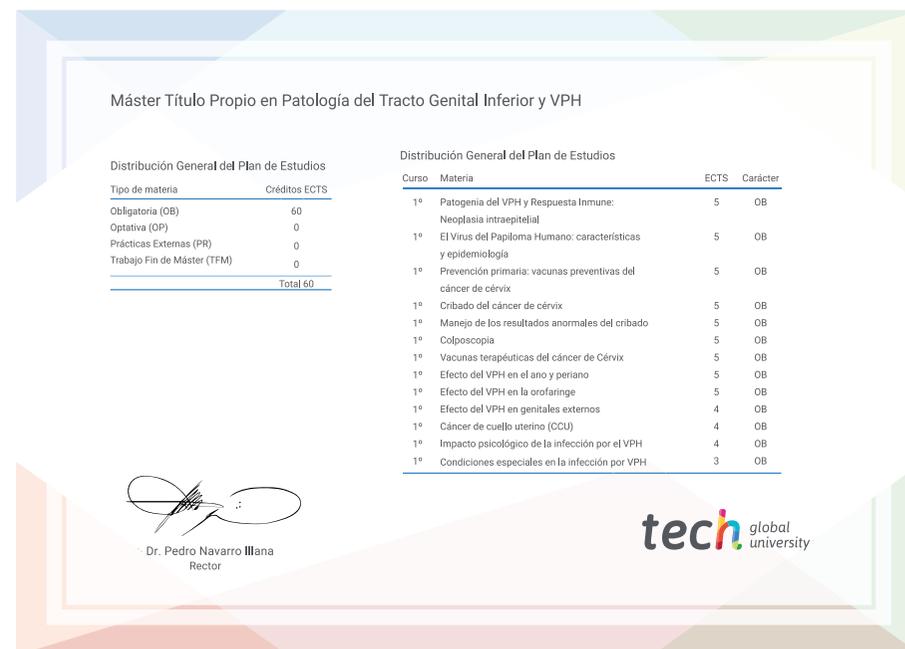
After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Professional Master's Degree in Lower Genital Tract Pathology and HPV**

Modality: **online**

Duration: **12 months**



\*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 languages  
virtual classroom



## Professional Master's Degree

Lower Genital Tract Pathology and HPV

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree

## Lower Genital Tract Pathology and HPV

