# DU Surgical & Interventional Endoscopy-





**One-year** university diploma



Basic and advanced flexible endoscopic techniques will be presented by experienced surgeons and endoscopists, with didactic interactive lectures, clinical case discussions and then practiced during the hands-on sessions. Students will learn key endoscopic procedures in a structured way, with mentorship from world-renowned experts in the field with access to the latest technologies and techniques.

300 hours total:

- 100h of e-learning
- 50h split in 3 sessions of hands-on training
- 150h clinical rotations

At the end of the program students will have:

- Acquired general fund of knowledge regarding disorders amenable to diagnosis and/or treatment using flexible endoscopy
- Understood signs/symptoms, pathophysiology, and natural history of diseases amenable to endoscopic therapy and be able to apply this knowledge to identify the indications, contraindications, risks and complications of an endoscopic procedure or to identify radiological and/or alternative/adjunctive surgical treatments.









• Acquired/enhanced the skills required to create a foundation in the practice of diagnostic and interventional endoscopic procedures in a structured way under the mentorship of the word's leaders in the field, with access to the latest technologies, techniques, and platforms.

## **E-LEARNING MODULES**

Access to high-quality courses designed and delivered by experts on the EVE e-learning platform: <a href="https://mse.eve-evolving-education.eu/">https://mse.eve-evolving-education.eu/</a>

### DURATION

- 100h

#### PROGRAM AND OBJECTIVES

#### MODULE 1 - BASIC PRINCIPLES

- Possess a basic technical understanding of endoscopic equipment, platform and accessories.
- Demonstrate the care, cleaning and basic manipulation of upper and lower GI endoscopes.
- Understand the principles and practice of patient preparation, sedation, anesthesia and airway management for surgical endoscopy.
- Know the indications and contraindications for surgical endoscopy interventions.
- Know the basic principles of laparoscopic surgery.
- Understand the principles of cautery, tissue resection and specimen orientation.
- Be able to recognize and manage common complications.
- Understand the management of post-operative care including pain, diet and activity.

### MODULE 2 – DIGESTIVE

- Safely and effective access the upper and lower GI tract with a variety of endoscopes.
- Recognize and manage abnormal findings of the GI tract, with an understanding of the pertinent anatomy, pathology and imaging.
- Recognize and understand how to evaluate post-surgical anatomy of the GI tract, with an understanding normal versus abnormal postoperative findings.
- Recognize and treat surgical and endoscopic complications in the digestive tract.
- Be able to perform basic upper and lower GI diagnostic and therapeutic procedures, including:
  - o Tissue biopsy
  - o Ablation
  - o Hemostasis
  - o Dilation of stenoses
  - Endoscopic enteral access
  - Placement of stents for palliation of management of complications



INSTITUTE OF IMAGE-GUIDED SURGERY







• Understand the advanced endoscopic techniques for treatment of GERD, Barrett's esophagus, achalasia and obesity.

### MODULE 3 - HEPATOBILIARY

- Understand normal and common post-operative anatomy of the HPB system.
- Understand the terminology of liver segmentation and the liver pedicle.
- Understand the diagnostic and management principles of:
  - Malignant processes such as intra-hepatic, peri-ampullary, pancreatic and biliaryderived tumors as well as
  - Benign processes such as ductal stones, variations in anatomy (papillary, ductal or biliary tract), fistulas and strictures.
- Possess a basic understanding of the variety of pancreatic tumors and differences in diagnosis and management
- Understand the use of various imaging modalities for evaluation of HPB pathology, including:
  - o EUS
  - o ERCP
  - o Choledochoscopy
  - $\circ \quad \text{Cholangiography} \\$
  - o CT scan
  - o MRI
- Understand the contraindications, indications and basic techniques of surgical and endoscopic HPB interventions such as:
  - o ERCP
  - o Tissue ablation
  - Percutaneous catheterization
  - Stenting
  - Balloon dilatation
  - o Biliary drainage
  - o Liver resection
  - Pancreatic resection (segmental vs. enucleation)
- Understand how to recognize and manage common complications from HPB interventions such as fistulas, structures, leaks and bleeding.

### MODULE 4 – IMAGING MODALITIES

- Understand the basics of diagnostic imaging and guidance modalities (NBI, echo-endoscopy, endocystoscopy, confocal endomicroscopy, NBI, ...)
- Acquire the fundamental knowledge, practical skills and clinical judgment necessary to practice flexible endoscopy











### **PRACTICAL TRAINING**

Personalized step-wise training through hands-on workshops on simulators, ex vivo and in vivo.

### LOCATION

- IHU Strasbourg, France

### **DURATION AND PROGRAM**

- 50h split in 3 sessions of hands-on training
- Practical sessions include lectures, clinical cases discussion, live transmission of clinical procedures, hands-on training in experimental laboratory on simulators, ex-vivo and in-vivo models in relation to the online modules validated prior to the practical session.
  - Session #1 (timeframe : winter) Focus : Module 1 Basic Principles
  - Session #2 : (timeframe : spring) Focus : Module 2 : Digestive
  - Session #3 : (*timeframe : summer*) Focus : Module 3 Hepatobiliary and Module 4 Imaging modalities









# **CLINICAL TRAINING**

Access to our facility and partner centers for a clinical immersion in endoscopic and MIS procedure.

#### LOCATION

- Partner centers
  - Nouvel Hôpital Civil, Strasbourg, France Pr Silvana Perretta
  - Università Cattolica del Sacro Cuore, Rome, Italy Pr Cristiano Spade
  - Fatebenefratelli Isola Tiberina Gemelli Isola, Rome, Italy Pr Guido Costamagna
  - Azienda Ospedaliera Santa Maria di Terni, Terni, Italy Dr Maurizio Fazi
  - Colentina Hospital, Bucharest, Romania Dr Theodor Voiosu
  - Ordensklinikum, Barmherzige Schwestern, Linz, Austria Pr Georg Spaun
- Trainee's home institution or other center of trainee's interest: a letter of agreement, describing procedures the candidate will be exposed to, and duration of stay will be required.

### DURATION

- 150h
- Each trainee must complete three weeks of clinical placement, to be done in one or several sessions, in one or several centers, under the supervision of a tutor in each center.
- During clinical training, trainee's access to surgical endoscopy procedures is required.

For additional information, please visit <u>https://eve-evolving-education.eu/</u>



