



School of Robotic Surgery

European Institute of Oncology

Under the auspices of



Robot-assisted surgery: an inevitable path for the future

Over the past few years, technology has marched hand in hand alongside daily clinical and surgical practice.

The introduction of the da Vinci system has brought about a significant transformation in the world of surgery. The surgical procedure is mediated by a sophisticated technological system in which the surgeon is no longer in direct contact with the patient. The surgeon has to carry out virtual movements that are subsequently transmitted to the robot, which faithfully and accurately repeats those actions. Anatomical details are more closely highlighted and further innovative surgical paths can be more closely explored.

The visual field is magnified and extra angles and perspectives are available. In addition, 3-dimensionality is maintained.

The surgical team plays an increasingly important role. The chief surgeon needs to work in even closer harmony and trust with the assistant. The anaesthesiologist encounters new and complex challenges.

The nurse has to acquire new knowledge as regards the materials and their assembly.

Robot-assisted surgery was employed at the European Institute of Oncology for the very first time on 1st November 2006. Since then it has been used in urology, gynaecology, thoracic, abdomino-pelvic, minimally invasive, and head-and-neck surgery. The encouraging clinical results and the increasing scientific interest surrounding robot-assisted surgery have led the European Institute of Oncology to add a new objective and challenge: education and training in robotic surgery.

The experience acquired over the last few years is offered to those colleagues who are willing to learn more about this new technology, via the School of Robotic Surgery under the umbrella of IEO Education.

The Faculty of the IEO School of Robotic Surgery

Faculty

The faculty of the IEO School of Robotic Surgery comprises surgeons from the major surgical disciplines, i.e. gynaecologic, urologic, abdomino-pelvic, minimally invasive, thoracic, and head and neck surgery. The surgeons are supported by the Division of Anaesthesiology and Intensive Care as well as the OR nursing staff. In addition to this multidisciplinary aspect, the concept of the surgical robotic team as a whole, i.e. the surgeon, the assistant, and the OR nurse, is pivotal to the philosophy of the IEO School.

The School's faculty comprises:

Abdomino-Pelvic Surgery: Fabrizio Luca, MD

Gynaecologic Oncology: Luca Bocciolone, MD, & Vanna Zanagnolo, MD

Head and Neck Surgery: Mohssen Ansarin, MD

Minimally-Invasive Surgery: Paolo P Bianchi, MD

Thoracic Surger: Giulia Veronesi, MD

Urology: Ottavio de Cobelli, MD, PhD

Anaesthesiology and Intensive Care: Rita Paneri, MD;
Daniele Sanches, MD;
Dario Vezzoli, MD

Operating Theatre Nurses: Danuta Lichosik, coordinator;
Chiara Arnaboldi; Davide Astolfi;
Massimiliano Granata; Silvia Lacchini

Educational Activities

The IEO School of Robotic Surgery organizes four different types of educational activities.

Basic training courses

These courses are aimed at individual surgeons as well as surgical robotic teams. The number of trainees is limited in order to provide tailored and dedicated training programs. Participants are divided into two groups so that they can take an active part in the practical sessions. Practical sessions are performed on inanimate animal models. Trainees can observe and discuss the cases in the OR with the guest faculty as well as with the IEO faculty. They will have the opportunity to take part in interactive educational sessions within a multidisciplinary oncologic context. A maximum of three participants can practice on the *da Vinci* system during the dry lab sessions.

The course format is as follows:

Day 1 – Group A + B: Theory session + dry lab

Day 2 – Group A: Case observation / Group B: Dry lab

Day 3 – Group A: Dry lab / Group B: Case observation

These courses can be tailored according to the participants' needs.

Case observation

It is a two-day intensive practical training programme, highly focussed on live case observation and one-on-one interaction with the faculty. This course is especially designed for surgical teams comprising a maximum of 3 people (2 surgeons and one nurse) with the following objectives:

- Understanding the functions and the operations of the *da Vinci* Surgical System;
- Robot set-up and organization of the operating room
- Patient preparation and positioning
- Port placement location and strategy
- Procedural steps of different techniques
- Alternative docking and surgical approaches
- Strategies for developing a successful robotic surgery program

Proctoring programmes

These training programmes are aimed at those surgeons who wish to set up their robotic activity within their own institution. The training surgeons are supported by one of the robotic surgeons of the IEO School of Robotic Surgery. The trainee(s) and tutor establish a training program in order to develop a uniform learning curve that will lead to good patient outcomes similar to those obtained by the most expert surgeons.

It is extremely important that the impact of the learning curve on the quality of treatment be reduced as much as possible, especially in oncology.

Nursing programme

This educational activity is aimed at OR nurses and focuses on those aspects linked to the *da Vinci* System set-up before robot-assisted surgery, with theory and practical sessions.

The course format is as follows:

Day 1: Presentation of the *da Vinci* Surgical System and practical exercises with interactive troubleshooting session.

Day 2: Robot set-up and organization of the operating room for the different surgical disciplines, i.e. abdomino-pelvic, gynaecologic, head-and-neck, urologic, thoracic robotic surgery. Practical exercises on dedicated models, with interactive troubleshooting session.

Day 3: Practical training during surgery.



The European Institute of Oncology was founded by Prof. Umberto Veronesi in 1994. The Institute was designed to deliver high quality, patient care in an efficient yet friendly environment. The clinical approach is delivered as evidence-based medicine and translational research. The hospital is a comprehensive cancer centre with 328 beds and 9 operating rooms. A second building has been recently built and inaugurated. It is mostly dedicated to out-patient and day surgery activities. The new building has 5 new operating rooms, two of which are fully integrated.

Accommodation

The IEO has special arrangements with several hotels and bed & breakfast facilities in the neighborhood. Please contact the Scientific Secretariat of IEO Education for more detailed information and for reservations.

Information & Contacts

For any information about the IEO School of Robotic Surgery and its courses, please contact the Scientific Secretariat at:

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The School of Robotic Surgery is supported by:

