

Mario Luzzatto Simulation Center Humanitas University Via Rita Levi Montalcini, 4 Pieve Emanuele (MI)

Course in simulation with Drylab and Wetlab techniques of ocular microsurgery 2023

COURSE DIRECTORS
Prof. Paolo Vinciguerra
Prof. Mario Romano



## **Course type and target audience**

The course aims to provide surgical knowledge for the management of cataract surgery and vitreoretinal surgery, through face-to-face discussion with experienced surgeons and the support of a contextual practical activity. Course participants will acquire theoretical skills on surgical techniques, in their respective fields, and practical skills in managing the individual steps necessary for the surgical procedure.

The teaching modality is divided into lectures lectures supported by practical activities with dry-lab and wet-lab simulation stations for cataract surgery and vitreoretinal surgery.

## Dates VITREO-RETINAL SURGERY

20, 21, 23 March 4 April

## **CORNEA SURGERY**

30, 31 march

## **CATARACT SURGERY**

22, 24 March 3, 5, 6 April



# Paolo Vinciguerra Director of the Department of Ophthalmology Head of Ophthalmology

Operating Unit Humanitas Research Hospital - Rozzano MI



## **Mario Romano**

Director of the Department of Ophthalmology Head of Ophthalmology Operating Unit Humanitas Castelli /Gayazzeni - Bergamo

#### **COURSE 1: VITREO-RETINAL SURGERY**

- 8 students per edition
- Aimed at: final-year residents and new specialists
- Dates editions to be chosen based on availability

### Hours: 9:00 - 19:00

#### • THEORETICAL STATION

- Initiation, basic concepts and indications for vitrectomy and scleral surgery
- Vitrectome, impos tation parameters, consumables
- Contact and noncontact visualization systems

## • VIRTUAL SIMULATION STATION Vitrectomy Training Module

- Manipulation of instruments in the vitreous cavity and adjustment of fluidics parameters
- Central and peripheral vitrectomy
- laloid detachment.
- Membranectomies (ILM/ERM)
- Retinal detachment- scleral indentationendolaser

### WETLAB STATION IN ANIMAL EYE Vitrectomy and scleral surgery

- Assembly and management of equipment and consumables
- Incisions, gauges and trocars
- Central and peripheral vitrectomy
- Exchange of fluids and endotamponators
- Surgical maneuvers on the sclera

### **COURSE 2: CORNEA SURGERY**

## - 8 students per edition

- Aimed at: final-year residents and new specialists
- Dates editions to be chosen based on availability

## Hours: 9:00 - 19:00

## • THEORETICAL STATION

- Cataracts in special and/or complex situations
- Most frequent intraoperative complications and how to resolve them

## • SIMULATION STATION: Complex cataract surgery

- Capsulorrhexis management.
- Zonular disconnection or weakness
- White intumescent cataracts
- Mature and hypermature cataracts
- Posterior subcapsular cataract
- Cataract with narrow pupil

## WET-LAB STATION: Complex cataract surgery in animal model

- Capsulorhexis with capsular staining

- Iris reactor implantation in narrow pupil and zonular instability

- Triamcinolone staining in anterior

vitrectomy and iridectomy

- Implantation of capsular tension ring

- Lens implantation: posterior chamber,

sulcus, anterior chamber, intrascleral implantation

#### **COURSE 3: CATARACT SURGERY**

- 8 students per edition
- Aimed at: final-year residents and new specialists
- Dates editions to be chosen based on availability

## Hours: 8:00 - 16:00

#### THEORETICAL STATION

- Simple and complex corneal sutures, single and continuous
- Full-thickness and partial-thickness corneal drilling
- Management of corneal tears
- Stripping descemet

#### WET-LAB STATION: Corneal sutures on model and animal material

- Single suture (3-1-1, slipknot)
- Cross suture
- Continuous suture
- Suture of corneal laceration

## WET-LAB STATION: corneal drilling on animal material and transplantation model

- Full-thickness suction drilling
- Partial thickness drilling for DALK
- Positioning 4 cardinal points
- Single and continuous sutures on keratoplasty model

### WET-LAB STATION: stripping Descemet

- Stripping Descemet per DMEK
- Staining DMEK

#### **AVENUE**

**Humanitas University** 

Via Rita Levi Montalcini 4. 20072 Pieve Emanuele (MI)

#### **ORGANIZING SECRETARIAT Humanitas EDU**

edu@hunimed.eu

#### **HOW TO REGISTER**

Registration is possible only through ww.humanitasedu.it

#### REGISTRATION

The participation fee for each course is €800 (including VAT)

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