5-6 April | **Vitreoretinal surgical Basic Course**

This course uses abstract scenarios to train basic surgical skills, such as instrument navigation in the vitreous and proper OR machine settings. Trainees will also learn to visualize the vitreous through efficient use of microscope and light source. Different steps of vitreoretinal surgery will be trained separately; following abstract instrument handling tasks, trainees will practice first steps in peeling and removing membranes in a simulated surgical environment. Refines already acquired surgery skills by training multi-step vitreoretinal procedures under increasingly demanding conditions, and treatment of retinal detachment.

Training objectives

- Proper settings for vitrectomy fluidics, fappropriate cutting rates, infusion, and aspiration levels
- Vitrectomy handpiece manipulation for effective tissue cutting and aspiration
- Use of scleral indentation for working in the periphery
- Laser probe manipulation for effective tissue adhesion with minimal burning of healthy retina
- Improved bimanual dexterity as needed in complex tasks
- Safely grasping and peeling membranes with low to moderate adherence.
- Retinal deetachment procedures

Lectures

Dynamics (vitrectomos) and fluidics
Tamponade in surgical management
Vitreous dyes and retinal structures
Basic rules of Retinal Detachment Surgery
Basic rules of Vitrectomy

Surgical Simulator

This course uses abstract scenarios to train basic surgical skills, such as instrument navigation in the vitreous and proper OR machine settings. Trainees will also learn to visualize the vitreous through efficient use of microscope and light source. Different steps of vitreoretinal surgery will be trained separately; following abstract instrument handling tasks, trainees will practice first steps in peeling and removing membranes in a simulated surgical environment. Refines already acquired surgery skills by training multi-step vitreoretinal procedures under increasingly demanding conditions, such as treatment of retinal detachment.

Steps:

- Navigation and instruments
- Posterior Hyaloid Detachment
- Laser Coagulation
- The internal Limiting Membrane
- Retinal Detachement

Wet-Lab with Artificial eyes

- Incisions, calibers and trocars.
- Central and peripheral vitrectomy
- Endotamponadores.
- Surgical maneuvers on sclera.

Indirect Opthalmoscope Simulator

- Principles
- Clinical cases

Faculty

Ana Souza e Silva
Bernardo Feijóo
Cláudia Bacalhau
Cláudia Gonçalves
Daniele Oliveira
Fernanda Vaz
Filipe Simões e Silva
Filomena Ribeiro
Filomena Silva
Isabel Prieto
Joana Couceiro
João Nascimento
Leyre Zabala
Mafalda Mota
Mara Ferreira
Nuno Amaral
Paulo Guerra
Paulo Kaku
Pedro Carreira
Peter Pêgo
Rita Dinis da Gama
Silvia Todo Bom
Sofia Almada
Susana Teixeira
Tiago Bravo Ferreira

Special participation

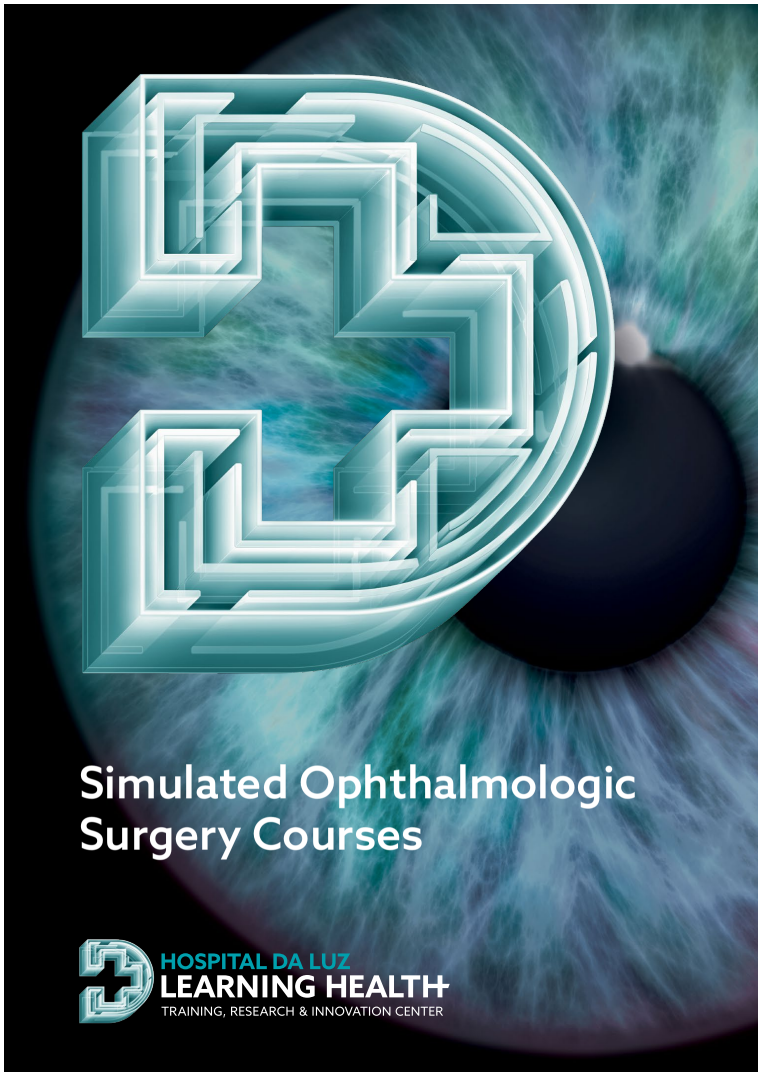
Guadalupe Cervantes
Postgraduate Professor of Ophthalmology - Universidad Autónoma de México (UNAM)

HOSPITAL DA LUZ
LISBOA

REGISTRATION LINKS

Cataract Basic Course | https://learninghealth.up.events/e/curso-basico-catarata
Video Symposium on Complex Cataract Surgery | https://learninghealth.up.events/e/videosimposio-cirurgia-da-catarata
Cataract Advanced Course | https://learninghealth.up.events/e/curso-avancado-catarata
Vitreoretinal Surgical Basic Course | https://learninghealth.up.events/e/curso-basico-de-cirurgia-vitreoretiniana

LUZ SAÚDE



First Courses 2019

22-23 March | **Cataract Basic Course**

29-30 March | **Video Symposium and Cataract Advanced Course**

5-6 April | **Vitreoretinal Surgical Basic Course**

Director: Filomena Ribeiro
Coordinator: Rita Dinis da Gama

An application has been made to the UEMS EACCME® for CME accreditation of this event

Ophthalmic Surgical programs improve the surgical skills and the best surgical outcomes

Building surgical skills can be challenging and stressful due to a steep learning curve and high stakes for the patient. Ophthalmic Surgical programs have moved toward the integration of simulation technology to improve the surgical skills and the best surgical outcomes.

Benefits of simulation-based training include:

- Realistic, lifelike simulations allows for immersive training.
- Enables rapid transfer of surgical skills.
- Standardized technique can help improve surgical outcomes.
- Objective measurement and recording surgical performance data can be used to support an instructor's feedback.
- Simulation-based training will allow the trainee to improve the surgical skills they want to master, become high-skilled before ever perform on a live patient.

The customized one-to-one courses will be designed in advance for each participant. Trainees complete an evaluation sheet before starting the trainning. A registration form indicating the specific surgical steps to be trained, and the selected difficulty level will be filled out beforehand.

Surgical tasks can be repeated in exactly the same setting until they are mastered. In addition, complications can be added under controlled conditions.

Course evaluation tools allow trainees to monitor the progression of learning.

22-23 March | **Cataract Basic Course**

The program is implemented in accordance with the The Virtual Cataract Surgery Course Manual for Ophthalmology Residents and the Surgical Skills Simulation Curriculum of Royal College of Ophthalmology.

In this course the different stages of cataract surgery will be trained separately; following abstract instrument handling tasks, trainees will practice first steps in capsulorhexis, lens segmentation and lens removal in a simulated surgical environment.

Training objectives

- Effective forceps techniques for optimal tissue manipulation during the rhexis
- Deeper understanding of appropriate vector forces for the rhexis
- Effective bimanual movements for phaco chopping
- Optimizing the fluidics of the phaco probe during each step of cataract surgery
- Eficcient sculpting for divide and conquer technique
- Dynamic bimanual movements needed for nucleus cracking Safe aspiration of cortex during irrigation and aspiration coaxial and bimanual
- Correct IOL implant

Lectures

Phaco Fluidics for Dummies
Pearls for Capsulorhexis and Hydromaneuvers
Pearls for Craking & Chopping
Recognize Alert Signals
My Tips and Tricks for cataract surgery

Surgical Simulator

Steps:
Navigation and instruments
Capsulorhexis
Hydromanouvers
Stop and Chop
Iol Implant

Wet-lab with Artificial eyes

Corneal incisions
Capsulorhexis
Phacoemulsification
IOL implant

Phaco Fluidics

- Principles
- Balance, collapse and power test

Indirect Ophthalmoscope Simulator

- Principles
- Clinical cases

29-30 March | **Video Symposium and Cataract Advanced Course**

This course offers training of complex cataract surgery cases under demanding conditions, such as increasing capsule tensions and weak zonules and complications. In the course trainees will be challenged by tasks and complications, requiring them to quickly adapt to the surgical scenario.

Training objectives

- Techniques for optimal manipulation during the rhexis errant tear
- Optimizing the fluidics of the phaco probe during each step of cataract surgery
- Dynamic bimanual movements needed for nucleus chop
- Dealing with pupil issues
- Dealing with weak zonulas
- Dealing with Intumescent cataract
- Correct insertion of a Toric IOL
- Anterior Vitrectomy

Lectures

Video Symposium on complex cataract surgery (Presentation and discussion of cases of complex cataract)

My Tips and Tricks for complex cataract surgery

Surgical Simulator

This course offers training of complex cataract surgery cases under demanding conditions, such as increasing capsule tensions and weak zonules and complications. In the courses trainees will be challenged by randomized tasks and complications, requiring them to quickly adapt to the surgical scenario.

Steps:
Capsulorhexis errant tear and capsular plaques
Horizontal and vertical Chop
Mayugin ring insertion and removal
Weak zonules and capsules
Intumescent Cataract
Anterior Vitrectomy
Implant and alignement of a Toric IOL

Wet-lab with Artificial Eyes

- Dye-Enhanced anterior capsulorhexis
- Iris retractors
- Zonular instability
- Anterior vitrectomy
- Implant and explant IOLs

Phaco Fluidics

- Principles
- balance, collapse and power test

Indirect Ophthalmoscope Simulator

- Principles
- Clinical cases