

# Education and Training Department Skills Centre



## Introduction to Phacoemulsification course

This 2-day course is designed to serve as an introduction to phacoemulsification cataract surgery for ST1 and LAT trainees who have completed the EyeSi courseware A and B training. Using a combination of wet-labs and a Digital Surgical Classroom, with wifi-linked Zeiss Stemi microscopes, trainees will be able to practice the core skills developed on the EyeSi, such as capsulorhexis techniques, sculpting and cracking the nucleus, and cortical aspiration techniques, in an environment that is more akin to live surgery.

The pre-course e-learning will focus on developing an understanding of phaco-dynamics as well as detailed explanations of the techniques underpinning each stage of phacoemulsification surgery. The focus will be on hands-on practical experience with only short introductions to each topic followed by practice on a variety of model eyes. We guarantee that each trainee will have the opportunity to complete 20 phacoemulsification procedures over the 2 days.

The course only open to doctors who have been appointed to a ST1 or an ST1 LAT post commencing in August 2019. A limited number of places will also be open to overseas trainees.

**It is mandatory for new ST1/LAT trainees to have completed this course before undertaking any live intraocular surgery.**

### Course structure

#### Day 1

- Introduction to the operating and Stemi microscopes
- Corneal incision demonstrations and videos
- Practicing corneal incisions
- Capsulorhexis demonstrations
- Practicing capsulorhexis techniques
- Demonstration of Little rescue manoeuvre
- Hydro-dissection demonstrations
- Incisions, CCC and hydro-dissection on Phillips Basic cataract eyes.
- Setting up phaco machines
- Video demonstrations of good and bad nucleus sculpting and cracking techniques
- Practicing sculpting and cracking techniques on Phillips eyes

### Course meal

#### Day 2

- Cortical aspiration – EyeSi demonstrations and surgical videos
- IOL implantation demonstration and videos
- IOL implantation practice
- Corneal suturing demonstration
- Practicing corneal suturing
- Psychology of surgery - preparing for surgery and coping with set-backs.
- Phacoemulsification practice with Phillips eyes
- Preventing and recognizing complications