Cataract Academy Course overview

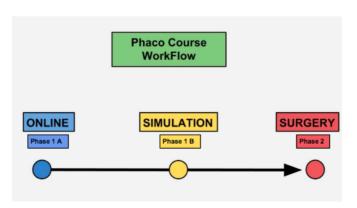
Premium surgical training to create phaco skilled, compassionate, & excellent millennial surgeons.



You made an excellent choice, maybe one of the best of your life.

You are about to learn how to change people's lives.

Our seamless training methodology is a 3 phase controlled skill development process.





The role of the online course is to build a robust mental preparation for the surgical training to follow.

HOW THE STRUCTURE OF EACH ONLINE MODULE IS TAILORED TO MILLENIALS

- There will be 10 separate online modules.
- The student will receive each week online assignments which they must complete before the next module is available.
- Each online course will have a short exam at the end to ensure content is reasonably understood. Until exam is passed the next module will not be available.
- Each module will be tailored to be short and have a decidedly high cadence for how key learning goals are conveyed.
- Online modules will never tell a student what they have to do
 in cataract surgery for a specific step, but rather why they
 would do that specific step using defined techniques. This
 forces every student to exercise critical thinking and in doing
 this each student discovers they possess a more complete
 understanding of a concept related to phaco surgery.
- Carefully selected or created animations, surgeon video talks, and simulation demonstrations will populate each online module to allow for active adult learning vs passive learning.



SECTION 1: What is Phaco?

- 1. Surroundings
- 2. Coordination
- 3. Position
- 4. Use of the Microscope
- 5. Knowledge of the Instrument
- 6. Phacodynamics (The pillar of Phaco)

7. Definitions

SECTION 2: Prepare to change lives

- 8. N^0 1 surgery in the world (and will duplicate in 2050)
- Surgery with most impact in a person's quality of life
- 10. Most important intervention in medicine to make a change in public health

SECTION 3: Phaco fundamentals

11. The most important concepts of Phaco

SECTION 4: The course (On-Line/Simulation/Surgery Course)

12. Characteristics of the course



SECTION 1:

- 1. Operating Room
 - 1. Spaces optimization for workflow & safety
- 2. Phaco Machine
 - Technology is king so know thy machine & how the Centurion phaco platform can aid you in having optimal surgical outcomes
- 3. Microscope
 - 1. "You can't do what you can't see"
 - 2. Alcon Ngenuity as a progressive new mode of visualization
- 4. Instruments
 - 1. Sterilization methods.
 - 2. Essentials.."every carpenter has a hammer & saw in his tool box"
- 5. Well trained staff Team
 - 1. Anesthesia
 - 2. Nurse

- 6. Consumables & their role in optimizing surgical outcomes
 - 1. Viscoelastic
 - 2. IOL
 - 3. Phaco system Cassette

SECTION 2: Phaco as "your everything."

- 7. "The blessed"......To be a skilled compassionate phaco surgeon is to unlock your true calling
- 8. The key role of Phaco in your practise (80% rule)
- 9. Phaco Economics & the correlation of practice prosperity to active surgical practice & commitment to surgical excellence



SECTION 1: Andragogy: Adult Learning

- 1. Competency Based
- 2. Objective Driven
- 3. Consistent Evaluation

SECTION 2: Cognitive, Integrative and Autonomous Stage

- 1. Critical Thinking in Phaco
- 2. Whole-Part-Whole Learning Model

SECTION 3: 80% of Phaco it's outside the OR

- 1. Hyperfocus, Exercise to concentrate in Surgery Coordination
- 2. Coordination exercises in phacO
- 3. Foot-Hand-Ear-Eye
- $\ensuremath{\mbox{4.}}$ Fine movements with your hands
- 5. Phacodynamics



- Concentration capacity (Mindfulness) & Neurolinguistics Programing
- 2. Critical thinking and Problem Solving
- 3. Complication Mindset
- 4. Communication in the operating room



- 1. Patient Status (Diseases, Conditions)
- 2. Risk Evaluation
- 3. IOL Calculation
- 4. IOL Selection
- 5. Costs (Ideal vs. reality)
- 6. "How to sell" (Premium & toric lenses)



- 1. Assistants
- 2. Workflows and Leadership
- 3. Nurses
- 4. Technicians
- 5. Anesthesiologist



- 1. Phaco Fundamentals
- 2. "Equilibrium" What goes out must equal what goes in!
- 3. Pumps.....why own a Ferrari if you cannot drive a 5 speed
- 4. The pedal.....discretion & finesse rule

- 5. Flowability/Holdability.....Know this & you are the master of your domain
- 6. US.....it's more a jack hammer then a shovel
- 7. Where are we going?



SECTION 1: Anesthesia

- 1. Types
- 2. Advantages in different cataract surgery scenarios
- 3. When topical is the wrong choice

SECTION 2: Visualization

- 1. Microscopes fundamentals for microsurgery
- 2. Microscope positioning relative to
- 3. Becoming parfocal to visualized from cornea to PC
- $\ensuremath{\mbox{4.}}$ Advantages of 3D imaging for cataract surgery

SECTION 3: Position of the patient and surgeon ergonomics

- 1. Principles of positioning
- 2. Protect yourself



- INCISION
- 1. Types
- 2. Technique
- 3. Induce Astigmatism importance
- PARACENTESIS
- 1. Types
- 2. Technique
- 3. Position

- VISCOELASTIC INTRODUCTION
- 1. Types
- 2. Technique
- CAPSULORHEXIS

SECTION 1: Rhexis Fundamentals

SECTION 2: Rhexis Deconstructed

SECTION 3: Rhexis in 3 dimensions

SECTION 4: Reassemble the Rhexis

- HYDRODISSECTION
- NUCLEO FRACTIS
 - 1. Different techniques
 - 2. Importance of knowing different techniques
- IRRIGATION ASPIRATION
- 1. Anatomy
- 2. Cortex behaviour
- 3. Movements (hands and IA tip
- 4. Parameters
- IOL INSERTION
- Wound interaction in which we need to be aware that the cartridge does not separate from the wound
- the correct movement of the IOL in the AC and to direct it to the capsular bag
- VISCOELASTIC ASPIRATION
- 1. Remove the viscoelastic completely from the AC
- 2. Remove viscoelastic from behind the IOL
- 3. Parameters
- INCISION MANAGEMENT
- 1. Sutureless incision management
- 2. How to make a good suture for our incision
- INTRAOPERATIVE MEDICATION IN PHACO
- 1. Inflammation control medication



CHARACTERISTICS OF MODULES

- MULTIPLE VIDEO (3 to 5 minutes)
- INTERACTIVE CASE OR PROBLEM (ONE SITUATION TO START LEARNING TO EXERCISE CRITICAL THINKING)
- PRESENTATION & ANIMATION (Keynote + Video & ANIMATION)
- QUIZZES EMBEDDED WITHIN EACH MODULE & SCORES AUTOMATICALLY COMPILED BY EDUCATION PLATFORM
- EACH STUDENT WILL BE FOLLOW BY ONE MENTOR THAT WILL ANSWER MAIL AND WILL HAVE 1 HOUR SKYPE CALL A WEEK
- Students will have to work together in some stages and know each other with feedback.
- 2. Students will have an active participation in each stage of the course.
- 3. Some tasks will be groupal.
- 4. Serious Evaluation.





- Advanced artificial eyes
- Eyesi VR Simulators



- 25 to 40 cataract surgeries (Mexico & Colombia location options available).
- * This Phase 2 stage is an optional part of the course with a separate fee.