

*Microsurgery Training and Research Laboratory,
Department of Orthopaedic Surgery, Columbia University*

**ADVANCED COURSE IN MICROSURGERY
5 DAYS**

The purpose of microsurgical training is to develop specialized surgical skills to facilitate the repair of the small vessels and nerves. Advanced course is tailored to more experienced surgeons who successfully completed the basic course.

Training is conducted as a three part process: reading the textbook, viewing the training videotapes and practicing surgical skills.

Dr. Brian Cooley's textbook: "A Laboratory Manual for Microvascular and Microtubal Surgery" and series of video tapes are used.

We are using our own video library created in the department.

SESSION ONE: (5-6 hrs.) "Brushing –up" on basics

Morning session:

Videos: "End-to-end arterial anastomosis on rat models with revision of the gaps using Q-tip"
Practice end-to-end arterial anastomosis using interrupted technique.

Video: "Simple Vein End-to-end anastomosis using interrupted technique"
Practice end-to-end venous anastomosis using interrupted suturing.

Lunch

Afternoon session

Videos: "End-to-side anastomosis "

Practice end-to-side anastomosis using femoral artery to the side of femoral vein.

Practice end-to-side anastomosis using femoral vein to the side of femoral artery (time permitted)

SESSION TWO: (5-6 hrs.)

Morning session:

Videos: "Interpositional Vein Graft "

Practice end-to-end venous anastomosis using interrupted suturing using epigastric artery.

Lunch

Afternoon session

Videos: "End-to-end Carotid Artery anastomosis "

Practice Practice end-to-end arterial anastomosis using interrupted technique on carotid artery.

Practice Practice end-to-end arterial anastomosis using one-way up technique on carotid artery.

SESSION THREE: (5-6 hrs.)

Morning session:

Videos: : “End-to-Side Carotid Artery Bypass Using femoral Artery”
Practice carotid end-to-side bypass using arterial graft (femoral artery).

Lunch

Afternoon session

Video: “Side -to-side anastomosis using femoral vessels”
Practice side-to-side anastomosis using femoral vessels.

SESSION FOUR: (5-6 hrs.)

Morning session:

Videos: : “Free Tissue Flap”
Practice groin cutaneous free tissue flap using femoral vessels pedicle.

Lunch

Afternoon session

Free flap continuation.

SESSION FIVE: (5-6hrs)

Practice procedures specialty related.

Vasovasostomy and Vasoepididymostomy
Fallopian Tubes repairs
Serratus anterior muscle flap to femoral vessels
Organ (renal) transplant utilizing continuous suturing.
Carotid artery work.