

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

***BASIC 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.

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.

SESSION ONE: (5-6 hrs.)

Welcome by the Course Director and brief description of course content and teaching format.

1. DVD:

Title: #1 "A sound mind in a sound body" by Dr. H.M. Dick
#2 "Getting ready for Microsurgery: Meet the Microscope"
#3 "Mechanics of microsurgical suturing"

PRACTICUM:

Working knowledge of the use of the operating microscope, micro instruments, fine suture 9-0, 10-0 by practicing suturing on different planes using latex rubber glove practice card.
Practice suturing silastic lumen using tubing

2. DVD:

Title: "Two-stay Interrupted End-to-End Anastomosis "Dr. Strauch

PRACTICUM:

Practice end-to-end arterial anastomosis using interrupted suturing
a. forehand
b. backhand

SESSION TWO: (5-6 hrs.)

DVD:

Title: "One-way-up Technique" Dr. Strauch

PRACTICUM:

Practice end-to-end arterial anastomosis using one-way-up suturing.

DVD:

Title: "Rat femoral Vein Anastomosis". Dr. Cooley

PRACTICUM:

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

SESSION THREE: (5-6 hrs.)

DVD:

Title: "Interpositional Vein Graft "by Dr. Cooley

PRACTICUM:

Practice interpositional vein graft using femoral vein and femoral artery.

PRACTICUM:

Practice end-to-end arterial and venous anastomosis without an approximator clamp.

SESSION FOUR: (5-6 hrs)

DVD:

Title: "End-to-side anastomosis" by Dr. Cooley

PRACTICUM:

Practice end-to-side anastomosis using femoral artery to the side of femoral vein. (1hr)

PRACTICUM:

Practice end-to-side anastomosis using femoral vein to the side of femoral artery. (1hr)

SESSION FIVE: (5-6hrs)

DVD:

Title: "Basic Techniques in Peripheral Nerve Repair" Dr. Strauch

PRACTICUM:

Practice epineural repair using sciatic nerve.

PRACTICE EXAM:

ARTERIAL AND VENOUS ANASTOMOSIS WITHIN A TIME LIMIT