

MICROSURGERY TRAINING LABORATORY

B. Basic Skills in Microsurgery (2 days)

This 2-day course has been specially designed for surgical residents in the first two years of their training (Orthopaedic, General Surgery, and Otolaryngology). This course will introduce residents to microsurgery and impart skills that will guide them in the microsurgical repair of medium sized vessels and nerves (e.g., radial artery/ median nerve at the wrist). The course begins with simple suture exercises on a latex sheet and moves onto more challenging exercises on our patented micro-trainer. Following this they perform end-to-end repairs of a lifelike bio-tissue artery model. This high fidelity model feels, sutures, and behaves like real live tissue. The second day starts with one more set of end- to-end anastomoses on lifelike bio-tissue artery. The participants then have the opportunity to prepare and do an end-to-end repair of the femoral neurovascular bundle in a biological model (chicken thigh).

Day 1

0830 - 1000hrs: Introduction to the microscope, micro-instruments, and

microsurgical technique (video)

1000 – 1100hrs: Latex strip model (Beginner) - 3orientations

1100 - 1115hrs: Coffee Break

1115 - 1245hrs: Latex Strip model (Advanced) - 3 orientations with software evaluation

1245 - 1345hrs: Lunch Break

1345 - 1400hrs: Vessel repair video

1400 – 1700hrs End to end repair of lifelike bio-tissue artery (2mm dia.) (Up to 3 repairs in a 6 cm

segment)

Day 2

0830 - 1000hrs: End to end repair of lifelike bio-tissue artery (1mm dia.) (Up to 3 repairs in a 6 cm

segment)

1000 – 1015hrs: Coffee Break

1015 – 1030hrs: Chicken thigh video

A member of the NUHS



1030 – 1230hrs: Dissect and repair chicken thigh artery, vein, and nerve

1230 – 1315hrs: Lunch

1315 – 1445hrs: Chicken vessel anastomosis (Up to 3 repairs)

1445 – 1500hrs: Coffee Break

1500 – 1700hrs: Chicken vessel anastomosis (Up to 3 repairs)