

Program Module B, Experimental Research Techniques

Day 1: Basic microsurgical techniques

- 09.00 - 09.30 Welcome, introduction and expectations for the course
- 09.30 - 10.00 Non-surgical techniques and surgical anatomy of the rat
- 10.00 - 10.15 Coffee and tea
- 10.15 - 11.00 Instruments
- 11.00 - 12.00 Suture materials and suture techniques

Practical exercises:

- 13.00 - 14.30 Microsurgical suture techniques on a latex glove
- 14.45 - 17.00 Anastomoses techniques on artificial vessels, using the MD PVC-Rat

Day 2: Experimental surgical techniques I

- 09.00 - 09.30 Vascular access
- 09.30 - 10.15 Jugular vein catheterization (stress-free blood sampling)
- 10.15 - 10.30 Coffee and tea

Practical exercises:

- 10.30 - 12.30 Jugular vein catheterization
- 13.30 - 14.00 End-to-end anastomosis of the rat femoral artery (theory)
- 14.00 - 17.00 Dissection techniques and vascular anastomosis (rat femoral artery)

Day 3: Experimental surgical techniques II

- 09.00 - 10.15 Anaesthesia including peri-operative care
- 10.15 - 10.30 Coffee and tea

Practical exercises:

- 10.45 - 17.00 End-to-side anastomosis of an artery. End-to-end anastomosis of a vein

Day 4: Experimental surgical techniques III

- 09.00 - 09.30 Asepsis
- 09.30 - 10.00 Experimental catheterization techniques in physiology, pharmacology and toxicology.

Practical exercises:

- 10.00 - 17.00: Catheterization of:
 - Portal vein
 - Femoral vein
 - Bile duct (double bile fistula)
 - Thoracic duct
 - Carotid artery

Day 5: Experimental surgical techniques IV

- 09.00 - 10.00 Inventarisation of requested techniques
- 10.00 - 10.15 Coffee and tea
- 10.15 - 11.00 Discussion on technical approaches

Practical exercises:

- 11.00 - 15.30 Requested techniques
- 16.00 - 16.15 Course evaluation