



Experimental Microsurgery

Time:	13 - 17 th of October 2014
Credit points	1,5 or 3 ECTS
Number of participants	9
Teaching form	Campus lectures and practical work
Teaching platform/web	www.microsurgery.se
Location	Medicinaregatan 18, Zoology building (follow signs inside building)

Course schedule, Week I

13/10 , Day 1

- 9:00 - 9:15 Introduction, presentation of the course (MA) (alla presenterar sig)
- 9:15 - 9:45 Instruments handling and care (MA)
- 9:45 - 10:15 Suturing material (MO)
- 10:15 - 10:30 Coffee/tea break
- 10:30 - 11:25 Introduction to the lab, routines and microscope.
- 11:25 - 12:25 LUNCH
- 12:25 - 16:30 Practical training: macroscopic suturing and knotting on non-living tissue (banan, compress, latexmodell)

14/10, Day 2

- 09:00 - 09:30 Anesthesia, analgesia, pre- peri- and postoperative care Del 1 (LE)
- 09:30 - 10:00 Anesthesia, analgesia, pre- peri- and postoperative care Del 2 (LE)
- 10:15 - 10:30 Coffee/tea break
- 10:30 - 11:00 Handling tissues, vascular dissection and its complications (MO)
- 11:00 - 11:45 Practical training: suturing and knotting on non-living tissue continuation (latexmodell)
- 11:45 - 12:45 LUNCH
- 12:45 - 16:30 Practical training: Dissection, cannulation, suture tying and microvascular suturing in the chicken thigh model

15/10, Day 3

- 9:00 - 9:30 Peri- and postoperative monitoring (MA)
- 9:30 - 9:50 Anatomy and physiology in rats and mice (MO)

- 9:50 - 10:30 Coffee/tea break
- 10:30 - 11:30 Cannulation of veins and arteries (MA)
- 11:30 - 12:30 LUNCH
- 12:30 - 16:30 Dissection and cannulation of the carotid artery and femoral vessels in the rat. Opening of the abdomen, handling of tissue and skin suturing

16/10, Day 4

- 9:00 - 9:30 Telemetry, pro and cons and instrumentation (MA)
- 9:30 - 10:00 Guest lecture (de Bruin)
- 10:00 - 10:15 Coffee/the break
- 10:15 - 11:15 Instrument company presentation (Agnthos)
- 11:15 - 12:15 LUNCH
- 12:15 - 16:30 Canulation of various vessels (carotid and femoral arteries, vena porta). Microvascular suturing. Practical training in aorta and liver dissection;

17/10, Day 5

- 9:00 - 9:15 Information on the literature review (MA)
- 9:15 - 9:30 Invited Lecture (De Bruin)
- 9:30 - 10:00 Asepsis (MH)
- 10:00 - 10:15 Coffee break
- 10:15 - 11:15 Demonstration of practical aseptic techniques; Setting up personal working space for aseptic work
- 11:15 - 15:00 Practical training: aorta and liver dissection; splenectomy and nephrectomy; canulation of various vessels/ducts (carotid and femoral arteries, vena porta, common hepatic duct, ureter). Tissue sampling techniques in rats and mice.
- 15:00 - 16:30 Oral course evaluation, handing out course certificates

Course schedule, Week II

Individual literature review work for students aiming at 3ECTS

Instructors and teachers

- LE Lars Ewaldsson, DVM, PhD. Laboratory for Experimental Biomedicine, University of Gothenburg
- MA Michael Axelsson, Professor, Dept. of Biological and Environmental Sciences, University of Gothenburg
- MO Mihai Oltean, MD, PhD. The Transplant Institute. Sahlgrenska University Hospital, Gothenburg
- MH Mats Hellström, Transplantation biology lab, Sahlgrenska academy, University of Gothenburg
- RB Ron de Bruin, Associate Professor, Erasmus Medical Center, Erasmus University Rotterdam, The Netherlands