Program Module ABS, Catheterization Techniques for Chronic Blood Sampling

This hands on surgery course teaches the basic techniques for catheterization of blood vessels. The catheterization techniques enable freely moving blood sampling for different research models such as used in DMPK, Safety Pharmacology and Toxicology. The course includes live sampling of blood in freely moving animals and uses the manual- and automated blood sampling technique.

The course is sponsored by Instech; catheter materials, tethering devices and an automated blood sampler are provided by Instech (www.instechlabs.com).

Day 1; Basic microsurgical techniques and materials

- 09:00 - 09:30 Welcome, introduction and expectations for the course
- 09:30 - 10:30 Rehearsal of basic surgical techniques
- 10:30 - 10:45 Coffee and tea
- 10:45 - 12:00 Vascular Anatomy and Catheters
- 12:00 - 13:00 Lunch

Practical exercises:

- 13:00 - 14:30 Anastomoses techniques on artificial vessels, using the MD PVC-Rat
- 14:45 - 17:00 Catheterization techniques on artificial vessels, using MD PVC-rat

Day 2; Catherization techniques

- 09:00 - 10:30 Vascular Access; jugular vein, carotid artery and femoral vein
- 10:30 - 10:45 Coffee and tea
- 12:00 - 13:00 Lunch

Practical exercises:

- 10:45 - 12:00 Catheterization of the jugular vein
- 13:00 - 17:00 Catheterization of the femoral vein & Carotid artery

Day 3; Freely moving blood sampling & Catheter patency

- 09:00 - 10:15 Peri-operative care including catheter patency strategies
- 10:15 - 10:30 Coffee and tea
- 10:30 - 11:15 Equipment for freely moving blood sampling

Practical exercises:

- 11:15 - 14:30 Catheterization continued
- 14:45 - 16:00 Manual and automated blood sampling in the freely moving animal
- 16:00 - 17:00 Closing remarks