

## Program Module GC, Glucose Clamping in freely moving rats and mice

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### **Day 1: Basic microsurgical techniques**

- 09.00 - 09.30 Welcome, introduction and expectations for the course
- 09.30 - 10.00 Good Surgical Practice (GSP)
- 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 - 15.30 Microsurgical suture techniques on a latex glove
- 15.30 - 17.00 Clamping techniques, what model to use

### **Day 2: Experimental surgical techniques I**

- 09.00 - 09.30 Vascular access
- 09.30 - 10.30 Jugular vein catheterization
- 10.30 - 10.45 Coffee and tea

#### ***Practical exercises:***

- 10.45 - 12.30 Jugular vein catheterization (demo first)
- 13.30 - 15.00 Carotid artery catheterization (demo first)
- 15.00 - 17.00 Femoral vein catheterization (Alternative, demo first)

### **Day 3: Experimental surgical techniques II**

- 09.00 - 10.15 Anaesthesia including peri-operative care
- 10.15 - 10.30 Coffee and tea
- 10.30 - 11.30 Challenges in designing insulin clamps in mice

#### ***Practical exercises:***

- 11.30 - 17.00 Vascular catheterization (jugular, carotid and/or femoral)

### **Day 4: Experimental techniques I**

- 09.00 - 10.00 Asepsis
- 10.00 - 11.00 Use of tracers for insulin action

#### ***Practical exercises:***

- 11.00 - 17.00: Experimental set-up, infusion and sampling

### **Day 5: Experimental techniques II**

- 09.00 - 10.00 Problems encountered, a discussion
- 10.00 - 10.15 Coffee and tea

#### ***Practical exercises:***

- 10.15 - 16.00 Do the experiment!
- 16.00 - 16.15 Course evaluation