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

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 Introduction inhalation anaesthesia and patient monitoring
- 11.30 - 12.30 Challenges in designing insulin clamps in rats and mice

***Practical exercises**:*

- 12.30 - 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 – 17.00 Catheterization for glucose clamping in rat or mouse

Day 6: Experimental techniques III

- 09.00 - 17.00 Do the experiment!

Day 7: Experimental techniques IV

- 09.00 - 16.00 Do the experiment!
- 16.00 - 16.15 Course evaluation