



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PVS0036 Autoradiography, 1.5 credits

Syllabus approved

2008-01-25

Subjects

Veterinary Medicine/Biology

Education cycle

Third cycle

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

English

Prior knowledge

The course is intended for PhD students within medical and biological fields.

Objective, including learning outcomes

The course will cover all aspects of whole body- and microautoradiography. Autoradiography techniques are valuable tools to detect the localization of radiolabeled compounds in laboratory animals, insects and plants. These techniques also make

it possible to study uptake, distribution, metabolism and elimination of compounds. The aim of the course is to provide theoretical and practical knowledge of the use of the autoradiography techniques and in addition to give the student understanding of the usefulness of these techniques in biological research.

Content

The course includes:

- radioisotopes useful for radiolabeling and autoradiography
- experimental design
- anatomy of commonly used animal models
- imaging techniques and resolution
- interpretation of results and quantification with image analysis
- pitfalls, artifacts and limitations.

The course consists of lectures, practicals, demonstrations and a "design a study" exercise.

Requirements for examination

Attendance to at least 90% of course time, and presentation of the "design a study" with the following discussion.

Additional information

The course will only be given if there are a minimum of 5 SLU PhD-students participating. Maximum participants 15.

Responsible department

Department of Biomedical Sciences and Veterinary Public Health