5MO107 Transgene Technology N/ T
7.5 ECTS

Course coordinator/examiner:
Mattias Alenius (MA) 090-785 67 86

Course administrator:
Ingela Nilsson, Department of Molecular Biology, Building 6K, floor 0 (ingela.nilsson@umu.se)

Lecturers:
- Mattias Alenius (MA) mattias.alenius@umu.se
- Anna Berghard (AB) anna.berghard@umu.se
- Staffan Bohm (SB) Staffan.Bohm@umu.se
- Jan Larsson (JL) jan.larsson@umu.se
- Simon Tuck (ST) simon.tuck@umu.se

Teaching assistants:

Course literature:
- List of suggested reviews included in the manual.

Lecture rooms:
- Astrid Fagraeus Hörsal A 103 Building 6A

Laboratory classes:
- Blue lab

Compulsory parts:
- Exam, laboratory classes incl. lab reports, demonstrations, individual project work and presentation. Attendance to lectures is strongly recommended. In case of absence due to sickness please inform MA immediately.

Exam:
25.3 09.00-13.00, Östra Paviljongen.

Resit:
18.5 09.00-13.00, Östra Paviljongen.
Week 8

Thursday, 21.2 Lecture room: Astrid Fagraeus
9.00-10.00 Roll call and course overview (MA)
10.00 – 12.00 The genetic method- an introduction to transgene technology (MA) chalk talk

Friday, 22.2 Lecture room: Astrid Fagraeus
12.00-15.00 insertion transgenesis (MA)

Week 9

Monday 25.2 Lecture room: Astrid Fagraeus
13.15-15.00 markers-how to visualise cells, processes and proteins (MA)

Tuesday 26.2 Lecture room: Astrid Fagraeus
09.00 – 11.00 Gene Targeting (MA)
11.00-12.00 Introduction to construction seminar and the diabetes lab (MA)

Wednesday 27.2 Lecture room: Astrid Fagraeus
09.00-12.00 Genome editing (MA)
Lunch
13.00-17.00 Planning Diabetes model lab

Thursday 28.2 Lecture room: Astrid Fagraeus
09.00-11.00 Drosophila molecular genetics (MA)

Friday 1.3
13.00-15.00 Behaviour studies (MA)
Assignment paper should be chosen and approved.

Week 10

Monday 4.3 Lecture room: Astrid Fagraeus
09.00 – 11.30 Transgenic farm animals/pets (AB)
Lunch
12.00-17.00 Diabetes model lab (blue Lab)

Tuesday 5.3 09.00- Diabetes model lab (blue Lab)

Wednesday 6.3 Lecture room: Astrid Fagraeus
12.00-17.00 Diabetes model lab (blue Lab)

Thursday 7.3 Lecture room: Astrid Fagraeus
09.00-11.00 More construction tricks (MA)
Lunch
12.00-17.00 Diabetes model lab (blue Lab)

Friday 8.3
09.00-11.00 Phenotypic variation-epigenetic factors (JL)
Lunch
12.00-17.00 Diabetes model lab (blue Lab)
Assignment Summary dead line!

Week 11

Monday 11.3 Lecture room: Astrid Fagraeus
09.00 – 11.00 RNAi and its uses C elegans as a model system (ST)
11.00-11.15 Lab instructions RNAi C elegans
Lunch
12.15-17.00 RNAi C elegans (Blue Lab)

**Tuesday 12.3** Lecture room: Astrid Fagraeus
09.00 - 12.00 Assignment presentations (MA)
Lunch
13.00-17.00 RNAi C elegans (Blue Lab)

**Wednesday 13.3** Lecture room: Astrid Fagraeus
11.30-12.30 Staffan Bohm Pax6
Lunch
13.30-17.00 RNAi C elegans (Blue Lab)

**Thursday 14.3**

**Friday 15.3**
09.00- 11.00 Assignment presentations (MA)
Lunch
12.00-17.00 RNAi C elegans (Blue Lab)

**Week12**

**Monday 18.3**
**Tuesday 19.3**
**Wednesday 20.3 Deadline lab reports**

**Thursday 21.3** Lecture room: Astrid Fagraeus
09.00 - 12.00 construction seminar

**Friday 22.3**

**Exam:**
25.3 09.00-13.00, Östra Paviljongen.

**Resit:**
18.5 09.00-13.00, Östra Paviljongen.