Course code: FMF0016

Couse title: Comparative Reproductive Endocrinology

Credits: 1.5

Educational cycle: Third-cycle education

Course leader: Theodora Kunovac Kallak

Responsible department: Department of Women's and Children's Health

Language: English

Research Track: Reproduction and Development

Content: The subjects covered will be reproductive endocrinology in various species, both sexes, different developmental stages, and gestation. Comparative aspects of reproductive endocrinology in humans and animals are an important part of the course.

The course gives 1.5 ECTS and corresponds to 5 working days. In addition to the 4 days of lectures, workshops, and group discussions, the participants shall use 1 day to construct a fictive research project in groups and present the project to the course.

Workshops:

- Hormone analysis, benefits and pitfalls with different methods
- Comparative aspects of the female reproductive cyclicity, what similarities and difference are there?

Instruction: The course will include interactive lectures, workshops, and group discussions.

Learning outcomes: The aim of the course is to enhance the knowledge and understanding of reproductive endocrinology in vertebrate animals and humans.

After completion of the course, the PhD-student should be able to:

Knowledge and understanding

- Explain basic control of reproductive endocrinology
- Describe basic endocrinology in female and male reproduction
- Describe different types of methods for hormone analyses including advantages and disadvantages

Skills and capacities

- Apply comparative aspects of reproductive endocrinology when planning and analyzing projects
- Plan a project within reproductive endocrinology

Evaluative capacity and approach

- Choose appropriate research methodologies and species for research projects within reproductive endocrinology
- Critically evaluate and analyze other PhD-students research project presentations

Examiner: Theodora Kunovac Kallak

Mandatory elements: Planning and presentation of a fictive project.

Assessment: Participants will work in groups to construct and orally present a fictive research project related to reproductive endocrinology for evaluation by senior researchers and other course participants. The research project must combine different research methodologies and comparative aspects. Successful completion of the course also requires active contribution where the participant ask questions and critically review other group presentations. Each individual student is evaluated based on their part of the oral presentation and critical questions and reflections of other groups presentations. All students must participate in at least 80 % of all interactive lectures, workshops and group presentations.

Course literature: Current scientific publications.

Entry requirements: Admitted to a third cycle program in medicine, veterinary medicine, biology, food science, nutrition, nursing, or related subjects, or to a specialist training program (e.g. resident) or equivalent within the same subject.

Maximum number of participants: 25

Selection: Priority will be given to PhD-students within reproductive biology at Uppsala University and Swedish University of Agricultural Sciences.

Other information: This course is organized by The Centre for Reproductive Biology in Uppsala (CRU), together with the department of Women's and Children's Health, Uppsala University.

Contact: Theodora Kunovac Kallak, <u>theodora.kunovac kallak@kbh.uu.se</u>

Course leader

Theodora Kunovac Kallak, <u>theodora.kunovac_kallak@kbh.uu.se</u>

Course administration

Agata Kostrzewa, agata.kostrzewa@kbh.uu.se