



UNIVERSITÀ
DEGLI STUDI
DI TERAMO

REPRODUCTIVE BIOTECHNOLOGIES

STRUCTURE AND FUNCTION OF REPRODUCTIVE SYSTEM:

ANATOMY OF REPRODUCTIVE SYSTEM

PHYSIOLOGY OF REPRODUCTION

Prof. Valentina Russo

Second-Cycle Degree Course in REPRODUCTIVE BIOTECHNOLOGIES

Structure and Function of the Reproductive System (1 year)

- ANATOMY OF THE REPRODUCTIVE SYSTEM
- PHYSIOLOGY OF REPRODUCTION

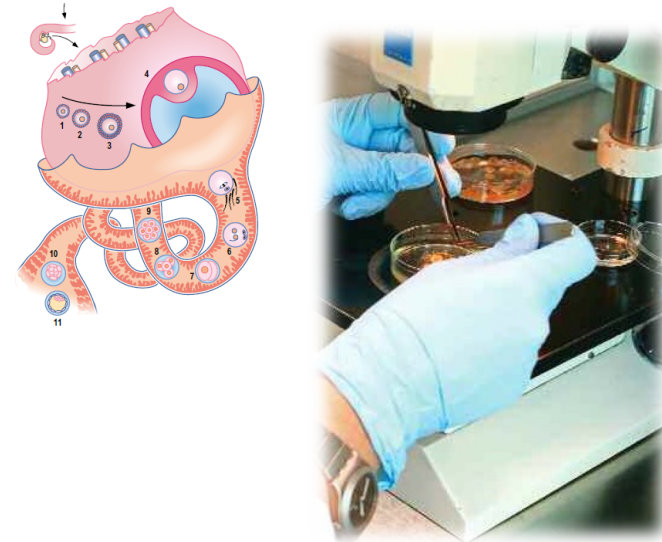
LECTURER: PROF. VALENTINA RUSSO

AIMS OF THE COURSE:

- To achieve a detailed overview of the existing relations between the structure and function of the female reproductive system in domestic animals and humans;
- To provide an in-depth knowledge on the neuroendocrine mechanisms that regulate the reproductive activity

MAIN/NOVEL TOPICS:

Using the animal model, together with the advanced technologies present in our laboratories, the students will acquire the ability to manage and evaluate the ovarian components and the female gamete, in particular. The course provides the basic knowledge necessary to deal with the successive courses.



ANATOMY OF REPRODUCTIVE SYSTEM

This module aims to provide an in-depth understanding of the anatomy of the reproductive system, focusing on the relationship between the structure and function of the female reproductive system in domestic animals and humans.

Using the animal model, the student will acquire the necessary techniques to assess reproductive structures; in particular, those of the ovaries and female gamete.

The course will cover five topics:

- macroscopic anatomy and topographic relationships of the female reproductive organs;
- cellular/tissutal organization of the uterus and fallopian tubes;
- microscopic anatomy of the structures contained within the gonad and the female gamete of domestic animals and women;
- correlation between ovarian follicle growth and angiogenesis in the follicular wall;
- basic methodologies for morphological analysis, isolating ovarian follicles and oocyte by light microscopy and transmission/scanning electron microscopy

PHYSIOLOGY OF REPRODUCTION

Physiology of the female reproductive system of domestic animals and women

Functional microscopic analysis and applied methodologies of the ovaries and the evaluation of the female gamete in domestic animals and women.

Laboratory protocols. Applying knowledge and understanding: This ability shall be proved by solving operational questions that require skills in handling laboratory equipment and a methods/protocols good knowledge used in the microscopic study of the female reproductive in domestical animals

These units foresee both the lectures and practical lessons.

The latter are undertaken in laboratories where students will have autonomous use of dedicated equipment.

There are **3 intermediate tests** at the end of **each week** to assess the students' learning level, and a final oral examination.

Prof. Russo receives students

by appointment

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