

ANGIOGENESIS AND REPRODUCTION

This course aims to provide an in-depth understanding ovarian chronological angiogenesis modulation during ovarian folliculogenesis: from the primordial follicles to the antral periovulatory phases. Using the animal model, the student will acquire the necessary knowledge of follicular angiogenesis that represent a model study in order to clarify the angiogenic mechanism controlling the homeostasis of adult tissues.

The course will cover three topics:

- comprehension of physiological angiogenic mechanism;
- correlation between ovarian follicle growth and angiogenesis in the follicular wall;
- follicular angiogenesis mechanism to understand the processes ensuring the reproductive success and homeostasis of adult tissues.

The module is divided into three units:

1. the angiogenic process: history, type of angiogenesis; angiogenic mechanisms and factors
2. understand folliculogenesis through angiogenesis;
3. understand angiogenesis through folliculogenesis.

These units structure both the lectures and the theoretical/practical lessons. The latter are undertaken in laboratories where students will have autonomous use of dedicated equipment.

There are tests at the end of each unit to assess the students' learning level, a group activities, and a final oral examination.