

Reproduction & Biotechnology 3. – 2024 Fall
Program of Lectures for the English Course 9th Semester:
MONDAYS – 2x45'

from 11:15 in the HETZEL lecture-hall

1.	9, Sept.	History and practical application of biotechnology in animal reproduction. (Importance, principles. Multiple ovulation, embryo flushing, morphological evaluation and transfer) (<i>B. Vincze.</i>)
2.	16, Sept.	Influencing the sex of the newborn. Production of sex-sorted semen. (<i>B. Somoskői</i>)
3.	23, Sept.	Basic principle of cryopreservation. Embryo freezing techniques: programmed freezing and vitrification. (<i>S. Cseh</i>)
4.	30, Sept.	In vitro production of embryos (in vitro maturation, fertilization, culture - IVMFC). Test tube baby programmes. (<i>S. Cseh.</i>)
5.	7, Oct.	Splitting of embryos by micromanipulation. Cloning and its significance. (<i>B. Somoskői</i>)
6.	14, Oct.	Advanced methods in reproductive biotechnology: gene modified animals. History, techniques and production of GMOs. Practical examples from the agriculture, pharmacology and human medicine. (<i>D. Török</i>)
7.	21, Oct.	Preparation and maintenance of stem-cell lines and its therapeutic application. Guest lecturer: Dr. Elen Gócza – Doctor of Hungarian Academy of Sciences
8.	28, Oct.	Structure of the male reproductive organs. Neuroendocrine regulation of the male reproduction. Endocrine and exocrine function of the testicles. Thermoregulation of the testis. (<i>Cseh S.</i>)
9.	4, Nov.	Physiology and pathology of epididymis and accessory sexual glands. (<i>Cseh, S.</i>)
10.	11, Nov.	Artificial insemination. I. Semen collection, evaluation, dilution, and cryopreservation. (<i>Cseh S.</i>)
11.	18, Nov.	Artificial insemination II. (cattle, pig, small ruminants) (<i>Cseh, S.</i>)
12.	25, Nov.	Artificial insemination III. (rabbit, horse) (<i>Cseh, S.</i>)
13.	2, Dec.	Artificial insemination IV. (dog and cat) (<i>Cseh, S.</i>)
14.	9, Dec.	Infertility in males. The contagious epididymitis and orchitis of rams. (<i>Cseh, S.</i>)