

Reproduction & Biotechnology 3. – 2025 Fall
Program of Lectures for the English Course 9th Semester:
MONDAYS – 2x45'
from 11:15 in the HETZEL lecture-hall

1.	8, 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.	15, Sept.	Influencing the sex of the newborn. Production of sex-sorted semen. (<i>B. Somoskői</i>)
3.	22, Sept.	Basic principle of cryopreservation. Embryo freezing techniques: programmed freezing and vitrification. (<i>S. Cseh</i>)
4.	29, Sept.	In vitro production of embryos (in vitro maturation, fertilization, culture - IVMFC). Test tube baby programmes. (<i>S. Cseh.</i>)
5.	6, Oct.	Splitting of embryos by micromanipulation. Cloning and its significance. (<i>B. Somoskői</i>)
6.	13, Oct.	Preparation and maintenance of stem-cell lines and its therapeutic application. Guest lecturer: <i>Dr. Elen Gócza – Doctor of Hungarian Academy of Sciences</i>
7.	20, 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>)
8.	27, 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.	3, Nov.	Physiology and pathology of epididymis and accessory sexual glands. (<i>Cseh, S.</i>)
10.	10, Nov.	Artificial insemination. I. Semen collection, evaluation, dilution, and cryopreservation. (<i>Cseh S.</i>)
11.	17, Nov.	Artificial insemination II. (cattle, pig, small ruminants) (<i>Cseh, S.</i>)
12.	24, Nov.	Artificial insemination III. (rabbit, horse) (<i>Cseh, S.</i>)
13.	1, Dec.	Artificial insemination IV. (dog and cat) (<i>Cseh, S.</i>)
14.	8, Dec.	Infertility in males. The contagious epididymitis and orchitis of rams. (<i>Cseh, S.</i>)