**Experimental animals – animal experiment course**

**Level „B”**

**31 March – 9 April 2025**

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| **Day** | **Time** |  | **Title and speaker** |
| 31 March  Monday | 8:30-9:15 | 1h | Introduction  Dr. Györgyi Szabó |
| 9:30-11:00 | 2h | Replacement, Reduction and Refinement  Dr. Györgyi Szabó  Humans and animal relations, ethics; Perspectives and limitations of animal usuage for scientific purpose. Animal welfare; Hungarian and foreign organisations  Dr. Györgyi Szabó |
| 11:15-12:00 | 1h | Monitoring, recording, registering the vital signs of the laboratory animals  Dr. Domokos Csukás |
| LUNCH BREAK | | |
| 12:45-14:15 | 2h | Experiments and models based on the behaviour of the laboratory animals  Dr. Júlia Tímár |
| 14:30-16:00 | 2h | Hygienic status levels of animal facilities, organizing a SPF transgenic breeding facility  Dr. Domokos Csukás |
| 1 April  Tuesday | 8:30-10:00 | 2h | Anatomy of the rodents  Dr. Domokos Csukás |
| 10:15-11:45 | 2h | Anatomy of rabbits, dogs and pigs  Dr. Domokos Csukás |
| LUNCH BREAK | | |
| 12:30-14:00 | 2h | Basic physiology of the laboratory animals  Dr. Domokos Csukás |
| 14:15-15:45 | 2h | Nutrition of the laboratory animals  Dr. Domokos Csukás |
| 2 April  Wednesday | 8.30-10:00 | 2h | Legal framework of animal procedures, housing and care in Hungary  Dr. István Gyertyán |
| 10:15-11:00 | 1h | Recognition of pain, suffering and stress; General rules of anaesthesia and analgesia. Humane endpoints and euthanasia  Dr. Domokos Csukás |
| 11:00-11:45 | 1h | Handling and treatment routes of the laboratory animals. Health care of the laboratory animals.  Dr. Domokos Csukás |
| LUNCH BREAK | | |
| 12:30-14:00 | 2h | Breeding and genetics of GA mice  Dr. Ferenc Erdélyi |
| 14:15-15:45 | 2h | Development of genetically altered mice  Dr. Ferenc Erdélyi |
| 3 April  Thursday | 8.30-9:15 | 1h | Differential diagnosis of laboratory animal diseases; management, lab tests, pathology  Dr. Domokos Csukás |
| 9:30-12.00  with a break | 3h | Mouse embryonic stem cells and chimeras in applied biology  Dr. Elen Gócza |
| LUNCH BREAK | | |
| 12.45-14.15 | 2h | Advanced anaestesiology, narcosis, analgesia part 2; Dosage and side effects of the applied drogs  Dr. Domokos Csukás |
| 14.30-16.00 | 2h | Theoretical background and significance of animal experiments. Definition of laboratory animal. Animal models is medical research. Extrapolation the result to human.  Dr. Györgyi Szabó |
| 4 April  Friday | 8.30-11.00 with a break | 3h | Nuclear transfer and other genetic reprogramming methods  Prof. Dr. András Dinnyés |
| 11:15-12.00 | 1h | In vitro methods for replacing the animal experiments  Dr. Sebestyén Anna |
| LUNCH BREAK | | |
| 12:45-14:15 | 2h | Planning and managing experiments and projects  Dr. Györgyi Szabó |
| 7 April  Monday | 8.30-9.15 | 1h | Health status monitoring and assessment in laboratory animals  Dr. Károly Erdélyi |
| 9.30-11.00 | 2h | Significant infectious diseases of laboratory animals.  Dr. Károly Erdélyi |
| 11.15-12.00 | 1h | Ethology of laboratory animals, and their natural breeds  Dr. Gergely Zachar |
| LUNCH BREAK | | |
| 12:45-13.30 | 1h | Avian embryomanipulation  Dr. Nándor Nagy |
| 13:45-15.15 | 2h | Detailed physiology of the experimental animals  Dr. Tamás Ivanics |
| 8 April  Tuesday | 8.30-10.00 | 2h | Speak about ’fish’ under an animal welfare perspective. The most important fish welfare questions.  Anita Rácz  Zebrafish as a scientific model organism  Anita Rácz |
| 10.15-11.45 | 2h | Replacement – alternative methods  Dr. Györgyi Szabó |
| LUNCH BREAK | | |
| 12:30-14:00 | 2h | General principles of surgery. Rules of asepsis and antisepsis  Dr. Györgyi Szabó |
| 14.15-15.45 | 2h | Bleeding and surgical hemostasis  Dr. Daniella Fehér  Wounds and wound care  Dr. Domokos Csukás |
| 9 April  Wednesday | 8.30-10.00 | 2h | Special laboratory animals  Dr. Gergely Zachar |
| 10.15-11.45 | 2h | Aspects of biostatistical analysis of experimental data  Dr. Gergely Zachar |
| LUNCH BREAK | | |
| 12.30-13:15 | 1h | Housing standards based on the regulation of the European Union  Dr. Györgyi Szabó |
|  | 13:30-15:00 | 2h | Husbandry technologies  Dr. Györgyi Szabó |