**Experimental animals – animal experiment course**

**Level „B”**

**31 March – 9 April 2025**

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| **Day** | **Time** |  | **Title and speaker** |
| 31 MarchMonday | 8:30-9:15 | 1h | IntroductionDr. Györgyi Szabó |
| 9:30-11:00 | 2h | Replacement, Reduction and RefinementDr. Györgyi Szabó Humans and animal relations, ethics; Perspectives and limitations of animal usuage for scientific purpose. Animal welfare; Hungarian and foreign organisationsDr. Györgyi Szabó  |
| 11:15-12:00 | 1h | Monitoring, recording, registering the vital signs of the laboratory animalsDr. Domokos Csukás |
| LUNCH BREAK |
| 12:45-14:15 | 2h | Experiments and models based on the behaviour of the laboratory animalsDr. Júlia Tímár  |
| 14:30-16:00 | 2h | Hygienic status levels of animal facilities, organizing a SPF transgenic breeding facility Dr. Domokos Csukás |
| 1 AprilTuesday | 8:30-10:00 | 2h | Anatomy of the rodentsDr. Domokos Csukás  |
| 10:15-11:45 | 2h | Anatomy of rabbits, dogs and pigsDr. Domokos Csukás  |
| LUNCH BREAK |
| 12:30-14:00 | 2h | Basic physiology of the laboratory animalsDr. Domokos Csukás |
| 14:15-15:45 | 2h | Nutrition of the laboratory animalsDr. Domokos Csukás |
| 2 AprilWednesday | 8.30-10:00 | 2h | Legal framework of animal procedures, housing and care in HungaryDr. István Gyertyán  |
| 10:15-11:00 | 1h | Recognition of pain, suffering and stress; General rules of anaesthesia and analgesia. Humane endpoints and euthanasiaDr. 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 miceDr. Ferenc Erdélyi   |
| 14:15-15:45 | 2h | Development of genetically altered miceDr. Ferenc Erdélyi |
| 3 AprilThursday  | 8.30-9:15 | 1h | Differential diagnosis of laboratory animal diseases; management, lab tests, pathologyDr. Domokos Csukás  |
| 9:30-12.00with a break | 3h | Mouse embryonic stem cells and chimeras in applied biologyDr. Elen Gócza |
| LUNCH BREAK |
| 12.45-14.15 | 2h | Advanced anaestesiology, narcosis, analgesia part 2; Dosage and side effects of the applied drogsDr. 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 AprilFriday | 8.30-11.00 with a break | 3h | Nuclear transfer and other genetic reprogramming methodsProf. Dr. András Dinnyés |
| 11:15-12.00 | 1h | In vitro methods for replacing the animal experimentsDr. Sebestyén Anna |
| LUNCH BREAK |
| 12:45-14:15 | 2h | Planning and managing experiments and projectsDr. Györgyi Szabó |
| 7 AprilMonday | 8.30-9.15 | 1h | Health status monitoring and assessment in laboratory animalsDr. 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 breedsDr. Gergely Zachar  |
| LUNCH BREAK |
| 12:45-13.30 | 1h | Avian embryomanipulationDr. Nándor Nagy  |
| 13:45-15.15 | 2h | Detailed physiology of the experimental animalsDr. Tamás Ivanics |
| 8 AprilTuesday | 8.30-10.00 | 2h | Speak about ’fish’ under an animal welfare perspective. The most important fish welfare questions.Anita RáczZebrafish as a scientific model organismAnita Rácz |
| 10.15-11.45 | 2h | Replacement – alternative methodsDr. Györgyi Szabó |
| LUNCH BREAK |
| 12:30-14:00 | 2h | General principles of surgery. Rules of asepsis and antisepsisDr. Györgyi Szabó |
| 14.15-15.45 | 2h | Bleeding and surgical hemostasisDr. Daniella FehérWounds and wound careDr. Domokos Csukás |
| 9 AprilWednesday | 8.30-10.00 | 2h | Special laboratory animalsDr. Gergely Zachar  |
| 10.15-11.45 | 2h | Aspects of biostatistical analysis of experimental dataDr. Gergely Zachar  |
| LUNCH BREAK |
| 12.30-13:15 | 1h | Housing standards based on the regulation of the European UnionDr. Györgyi Szabó |
|  | 13:30-15:00 | 2h | Husbandry technologiesDr. Györgyi Szabó  |