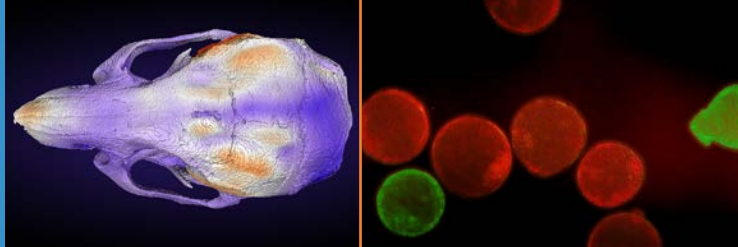


PHENOTYPING MODULE

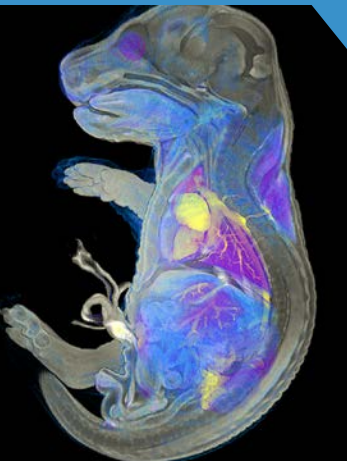
The Phenotyping Module encompasses a comprehensive collection of tools and know-how for the systematic and complex behavioral, physiological and morphological assessment of experimental mice and rats in a controlled specific pathogen-free environment.

Our experienced staff offer a wide variety of standardized tests and services, including those of IMPReSS (International Mouse Phenotyping Resource of Standardised Screens), mandated by our active partnership in the International Mouse Phenotyping Consortium. Notable is our capacity for conducting comprehensive phenotyping pipelines, providing a wide breadth of clinical information per experimental animal, and thereby minimizing overall animal usage.

Our mission is to support the preclinical research and development community with service of the highest professional standard. Our strength is also in customization of individual or complex secondary screens meeting the highest experimental standards.



DELIVERING AND CHARACTERISING RODENT RESEARCH MODELS



PRECLINICAL TESTING

Czech Centre for Phenogenomics offers a broad portfolio of highly standardized assays suitable for preclinical studies on rodents including established disease models. The interaction with Transgenic and Archiving Module allows development of customised preclinical models based on human pathogenic gene variants.

Extensive experience from standardized phenotyping enable us to run very comprehensive experiments. We offer assays from variety of physiological categories, which can be custom based arranged in complex testing workflows. Thus, we are able to answer key questions for drug development from efficacy to potential side effects.

The preclinical model can be terminally evaluated by broad clinical biochemistry analysis and experienced histopathologists. Furthermore, in the framework of the Centre for Preclinical Testing of the Czech Academy of Sciences we offer usual preclinical tests in GLP mode.



Central Bohemia Region



EUROPEAN UNION
European Structural and Investing Funds
Operational Programme Research,
Development and Education



Czech Centre for Phenogenomics

Institute of Molecular Genetics
of the Czech Academy
of Sciences



Czech Centre for Phenogenomics

The Czech Centre for Phenogenomics (CCP) is a large research infrastructure unique in combining genetic engineering, advanced phenotyping, specific pathogen free animal housing and husbandry, as well as cryopreservation and archiving, all in one central location.

CCP, hosted by the Institute of Molecular Genetics of the Czech Academy of Sciences, meets the increasing demands of the scientific community to study gene functions using mouse models. CCP has three divisions:

- Transgenic and Archiving Module
- Phenotyping Module
- Animal Facility Module

CCP provides open-access based services to researchers from the Czech Republic and abroad, irrespectively whether they are from the academic or commercial sector.

Contact Us:

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www.phenogenomics.cz



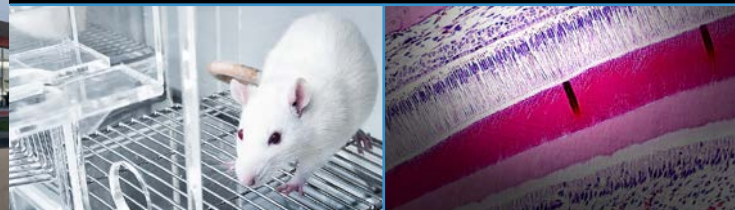
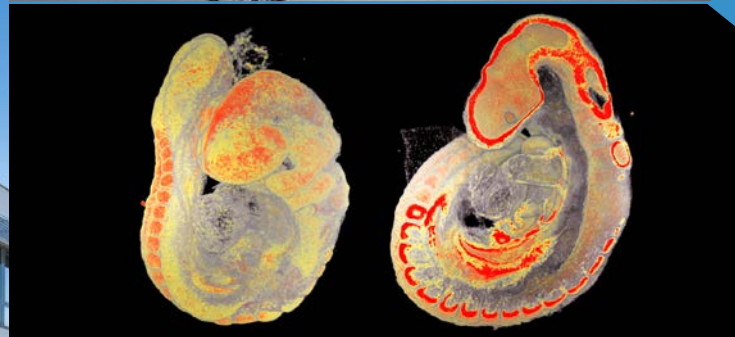
ANIMAL FACILITY MODULE

The Animal Facility contains five specific pathogen free (SPF) individual, fully separated breeding and experimental barrier areas, and an autonomous quarantine area, with a total capacity of more than 65,000 mice. Each barrier includes modern devices such as large volume steam sterilizers, H₂O₂ chambers, air or wet-shower entry areas, pass through biosafety cabinets, and ecofriendly HVAC technology.

Available services:

- Housing / Husbandry of mice and rats
- Biopsy / Injection
- Import / Export
- Time mating / Plug check
- Animal identification
- Animal management software
- Personnel training
- Project licences administration

Animal housing system of the individually ventilated cages improves the animal welfare and helps to keep the animal at a defined SPF health status. Trained personnel responsible for animal care and standard husbandry procedures reduce animal stress.



TRANSGENIC AND ARCHIVING MODULE

The Transgenic and Archiving Module generates novel genetically modified mice and rats using state-of-the-art technologies. The module provides a complete service, from the initial gene-targeting design, selection of suitable tools, generation of transgenic rodent models to the genotyping and breeding of desired animal models.

Available services:

- Custom models generation (knock-out, knock-in, conditional, point mutation and humanized models)
- Microinjection manipulation (pronuclear and ESC injection, zygote electroporation)
- Embryo and sperm cryopreservation, and reanimation of strains from frozen material
- Ovary transplantation
- Rederivation/Cleaning of mouse and rat strains
- Genotyping service
- Import/Export arrangements (in collaboration with the animal facility module)

