INFRAFRONTIER - Because Health Matters

European infrastructure for top level biomedical research

www.infrafrontier.eu



What is INFRAFRONTIER?

INFRAFRONTIER is the European research infrastructure for the development, phenotyping, archiving and distribution of model mammalian genomes. It is formed by more than 25 research centres in 14 European countries and one in Canada. In INFRAFRONTIER these partners join forces to commonly advance the basic understanding of human health and disease using mouse and rat models. Users of the services are biomedical researchers in more than 50 countries worldwide.

What does INFRAFRONTIER offer?

The INFRAFRONTIER Research Infrastructure offers open access to unique scientific platforms, resources and services and the expertise of the INFRAFRONTIER partners:

- Free of charge archiving of scientifically valuable mutant mouse strains by the European Mouse Mutant Archive (EMMA).
- Access to a growing collection of more than 6000 mutant mouse lines of the INFRAFRONTIER/ EMMA repository.
- Rodent model development (mouse and rat) services using gene targeting in ES-cells or CRISPR/Cas9 genome editing technologies.
- Systemic phenotyping of mutant mice for a whole-organism view on gene function, and specialised phenotyping supports in-depth functional exploration.

- Derivation of germ-free mice (axenic service) to functionally explore the contribution of the gut microbiome to phenotype-genotype interactions.
- A rapid target gene validation in complex cancer mouse models by the GEMM-ESC archive at the Netherlands Cancer Institute.
- Training in state-of-the-art technologies for the development, phenotyping and cryopreservation of mouse models under strict animal welfare standards and embracing the 3R principles.

2017

Launch of INFRAFRONTIER 2020 – focused on sustainability and coordinated by INFRAFRONTIER GmbH

2016

INFRAFRONTIER highlighted as landmark project by the European Strategy Forum on Research Infrastructure (ESFRI)

2014

Launch of IPAD MD – a project to coordinate the infrastructure resources of INFRAFRONTIER and IMPC on a global scale

2013

INFRAFRONTIER GmbH founded as management and coordination entity; launch of INFRAFRONTIER I3 to expand mouse mutant resources

2008-2012

Preparatory phase: Development of legal, organisational and financial framework of the INFRAFRONTIER Research Infrastructure

2006

INFRAFRONTIER published on the ESFRI roadmap

2001

First operational EC funding for European Mouse Mutant Archive (EMMA); first mouse clinics are established in Germany, France, UK etc

29 Partners in 15 countries





INFRAFRONTIER has shipped **more than 5000 mutant mouse lines** to its global user community.





Highly satisfied users: **4,8 points out of 5** is the average result for the quality of INFRAFRONTIER services in our permanent online user survey.

Top level services for excellent partners

The INFRAFRONTIER research infrastructure gains its strength by active partners who share a common European spirit – and a consistent goal: to advance the basic understanding of human health and disease by using rodent models – mice and rats – for biomedical research.

The INFRAFRONTIER partners are

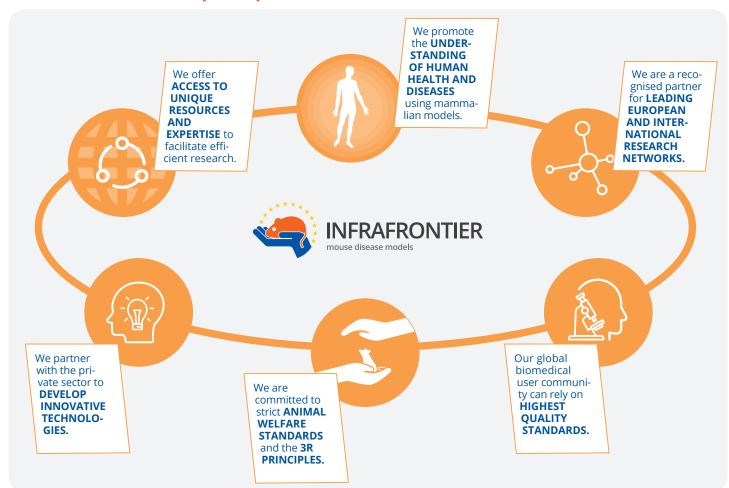
leading public research institutions and private companies. They actively work together to provide high-quality platforms, resources and services for the biomedical research community and to disseminate and share knowledge and expertise.

The INFRAFRONTIER GmbH coordinates the INFRAFRONTIER Research Infrastructrure, maintains and develops the IT and bioinformatics backbone and operates the INFRAFRONTIER web portal, the central access point to all INFRAFRONTIER platforms, resources and services.

The INFRAFRONTIER GmbH guides the development of

- Common scientific strategies to address national and European research agendas and to form strategic alliances
- Common standards and operation procedures to ensure highest quality and reliability
- Common technology development to further improve the INFRAFRONTIER resources and services
- Common outreach activities to spread the word about INFRAFRONTIER
- Common training activities to reach current users and the next generation of biomedical researchers

The INFRAFRONTIER principles



INFRAFRONTIER offers a consistent European infrastructure for the research with mammalian models to a global user community – and simultaneously sets standards in caring for animal welfare.