



COLONY MANAGEMENT SOLUTIONS

Biomere offers customized full-service mouse colony development, housing, breeding and care to ensure study-ready animal cohorts for PK/PD, toxicology and efficacy studies. We have a dedicated team of scientists and technicians who have expertise in handling and breeding complex genetically engineered models, and each colony has a dedicated manager who serves as a single point of communication. We can ship animal cohorts to third parties or directly to clients or perform DMPK and early toxicology studies in-house with priority scheduling. Our team can successfully execute studies in neonate and juvenile models by combining breeding and study execution in one facility to minimize stress due to transportation and acclimation. Additionally, our vivarium space has two separate facilities - a complete shower-in clean barrier and a SPF (specific pathogen-free) space so we can accept a broad range of models including immune-compromised mice. The team is responsible for health monitoring and surveillance of all rodents and implements rigorous testing.

GENETICALLY MODIFIED ANIMAL PROGRAM (GMAP)

Dedicated Project Management

Every client is assigned a dedicated team member, who is their single point of contact and directs the work of the clients' colony technicians.

Study-Ready Cohorts

Regardless of the size of your colony, we breed to client specifications within a specified time-line to ensure that study start times are not delayed. Upon completion of the breeding project, Biomere will transfer your models as directed – in-house for a Biomere study or shipped domestically or internationally to a facility of your choice.

Priority Scheduling

If you chose to utilize our services to continue your research plan, colony clients receive priority on our study schedule, extending the benefit of expedient study-start timing and timely completion of studies and data delivery.

MOUSE MODELS OF DISEASE

The Biomere team has experience in managing diverse rodent models, including neonate models, rare disease models, inducible and conditional expression models (Cre-lox, Tet-Off/On), reporter models, and complex multi-gene and multi-knockout models. The team has experience in breeding and developing rodent models covering the following disease areas:

Metabolic and liver diseases

- Amino acid disorders
- Copper storage diseases
- Enzyme/glycogen storage disorders
- Gastrointestinal disorders
- Glycolytic defects/deficiency disorders
- Hepatic therapeutic models
- Lipid metabolism/storage disorders
- Lysosomal storage disorders
- Obesity disorders

Bone diseases

- Calcification & mineralization disorders

Immunology and Inflammation diseases

- Clotting disorders
- Congenital anemias
- Immune system disorders

Neurological diseases

- Amyloid diseases
- Central nervous system diseases
- Motor neuron disease
- Mucopolysaccharide disease
- Neurodegenerative disease
- Neuromuscular disorders
- Peripheral nerve disorders

Eye diseases

- Disorders of the eye and retina

Kidney diseases

- Urea cycle disorders

Lung diseases

- Pulmonary/respiratory disorders

Genetically modified models

- Conditional expression models/ embryonic lethality
- Humanized gene models
- Inducible expression models
- Non-fluorescent & fluorescent reporter models

IT'S PERSONAL.

Driven to expedite your journey.

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BENEFITS OF WORKING WITH BIOMERE'S COLONY MANAGEMENT TEAM

Advanced Data Management

Electronic data management supports accurate customized inventory and pedigree reporting, and custom reports are available upon client request to support project needs.

Unique Model Needs

The Biomere team has deep expertise in the administration of custom diets, water, supplements, medications and enrichment options to maximize colony health and welfare.

Flexible Housing Options

Depending on health status, mice and rats are housed in individually ventilated cages (IVCs) within our maximum exclusion barrier or standard exclusion barrier. Preapproved strains, requiring biocontainment and rederivation/embryology services to eliminate pathogens, are housed in our quarantine suite in rigid isolators.

Genotyping Services & Genetic Integrity

Biomere has expertise in running conventional and real-time PCR assays to genotype genetically engineered animals. SNP panels are available for genetic background characterization.

Assisted Reproductive Technology (ART)

The Biomere colony management team has expertise in specific reproductive technologies including rederivation through embryo transfer, *in vitro* fertilization (IVF), cesarean delivery, and ovary transplantation.

Additional Services

Fostering, timed pregnancies, embryonic and fetal tissue collection, blood, urine and tissue collection are offered as well as additional services catering to client needs as requested.

COLONY HOUSING OPTIONS

Maximum Exclusion

No murine pathogens or specified opportunists allowed.

Our shower-in facility is free of all murine pathogens and specified opportunists. Space is available for mouse colony housing in IVC rack systems. Strains may undergo quarantine procedures or onsite rederivation for introduction to this facility.

Standard Exclusion

Specific pathogen free.

For those colonies that do not meet the maximum exclusion health status and have specific permissible pathogens that are of no consequence to a clients' research needs. Space available for mouse or rat colony housing in IVC rack systems.

Quarantine

Specific pathogens allowed.

In the interest of time, breeding and support of models with specific pathogens for crucial experiments can be done in Biomere's quarantine facility while your model is rederived to pathogen free status.