

OHSU Research Cores and Shared Resources

Transgenic Mouse Models

OHSU's cores are your campus technology partners dedicated to the success of your project. For optimal results, take advantage of the state-of-the-art scientific resources within the OHSU community.

www.ohsu.edu/cores



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To generate mouse models of human diseases the Transgenic Mouse Models (TMM) core modifies the mouse genome via reliable reproductive technology.

Mission Statement

The TMM assists investigators with the development of genetically engineered mouse models of human diseases for studying the physiological role of gene function and investigating the molecular mechanisms underlying pathological processes.

Services

1. Genome Editing via CRISPR/Cas9 System
2. Production of transgenic mouse strains by pronuclear microinjection of DNA constructs
3. Gene targeting by homologous recombination and clonal selection of mouse ES cells
4. Production of chimeric mice by injection of ES cells into B6 or B6-albino blastocysts
5. Production of chimeric mice by embryo aggregation
6. Cryopreservation of mouse embryos and sperm and long-term storage in dedicated cryo-freezers
7. Rederivation of mouse strains into specific pathogen-free (SPF) status by embryo transfer
8. Production of new mutant ES cells from transgenic or knock-out mice
9. In vitro fertilization for reconstitution and rederivation of mouse lines
10. Breeding and distribution to OHSU investigators of a limited number of inbred and mutant mouse strains
11. Consultation in all aspects of mouse mutagenesis, colony management and genotyping
12. Support letters for grant applications

Can We Help You?

Our services are available for OHSU investigators departments and programs as well as for non-OHSU customers.