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.

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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.

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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. Mouse genome engineering via CRISPR/Cas9 technology
- Production of transgenic mouse strains by pronuclear microinjection of DNA
- 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 and B6-albino blastocysts
- 5. Production of chimeric mice by embryo aggregation
- 6. Cryopreservation of mouse embryos and long term storage in dedicated cryofreezers
- 7. Rederivation of specific pathogen-free (SPF) mouse strains by embryo transfer
- 8. Production of new mutant ES cells from transgenic or knock-out mice
- 9. In vitro fertilization for a reconstitution and rederivation of mouse lines
- 10. Breeding and distribution to OHSU investigators of a limited number of inbred and mutant mouse strains

Can We Help You?

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



