



TRANSGENIC & GENE TARGETING SHARED RESOURCE

The Transgenic and Gene Targeting (TGTSR) is an important shared resource providing centralized technical services for the production of transgenic and gene-targeted rodents and genetically altered pluripotent stem cells for KU Cancer Center researchers. The TGTSR provides comprehensive services for genetic manipulation of the mouse and stem cell genomes. The TGTSR uses front-end technologies, including genome editing using CRISPR/Cas9 tools, and human induced pluripotent stem cells.

WHY IS THIS IMPORTANT TO YOUR RESEARCH?

The complex etiology of tumor development and physiological responses to cancer and cancer therapeutics require the use of animal models. As such, genetically altered mouse models are important tools for the researchers at KU Cancer Center. The production and analysis of such models ultimately lead to better understanding of biological processes of tumorigenesis, as well as *in vivo* models for diagnostic testing and cancer treatment.

SERVICES

The TGTSR has five major services:

1. Provide technical expertise in experimental design for KU Cancer Center Projects
2. Provide technical support for *in vivo* genetic alteration of mice
3. Provide technical support for genetic manipulation of pluripotent stem cell models
4. Provide support for strain development and maintenance
5. Educate KU Cancer Center researchers and trainees on new and emerging technologies for genetically altered animal models and manipulation of pluripotent stem cells

LOCATION

The University of Kansas Medical Center campus, Hemenway Life Sciences and Innovation Center, room G025

LEARN MORE

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