



Pennington Biomedical Research Center Transgenic Core Facility

LOUISIANA STATE UNIVERSITY SYSTEM

SOLUTIONS THAT WORK FOR YOUR RESEARCH

Our Mission

The Transgenic Core produces mice for faculty at Pennington Biomedical Research Center as well as investigators at other institutions. The core utilizes pronuclear microinjection and embryonic stem cell technologies to control gene expression in mice. The mission of the core is to provide a service to PBRC and other investigators to allow for the controlled manipulation of gene expression and to facilitate investigators in understanding gene function. The core strives to provide services at prices that are below those that are commercially available. Our Transgenic Core scientists are here to accommodate all of your gene targeting needs from vector construct to chimeric mice.

SERVICES AVAILABLE

Transgene Preparation

Our Core accepts investigator-supplied transgenes or will work with the investigator to design, construct and purify the transgene.

Pronuclear Microinjection

Approximately 200 C57BL/6J one-cell eggs are injected with the transgene. The anticipated **time for delivery is 2 months** after initial date of pronuclear microinjection.

Gene Targeting Service

The **"turn-key" service** our core provides is a more efficient way to introduce lox P sites in genes for cell specific knockout mice. The core will design and construct the targeting vector, electroporate, and screen ES cells. Inject the targeted ES cells and provide chimeric mice. All mice are produced on the C57BL/6J background, eliminating backcrossing. This unique academic service cost is well below commercial rates.

Injection of Embryonic Stem Cells

Targeted embryonic stem cells are injected into C57BL/6J blastocyst. **Chimeric mice are delivered at approximately 5 weeks of age.**

Cryopreservation

Male and female mice are provided by the user. Fertilized embryos and sperm are collected frozen and stored on site.

FOR MORE INFORMATION PLEASE CONTACT:

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