Research Tools

A Transgenic Mouse Model for Human Liver Disease

WARF: P01325US

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The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in a transgenic mouse model for human liver disease.

Overview

Many of those currently on waiting lists for liver transplants are victims of liver failure associated with hepatocyte toxicity. This toxicity can be caused by alcohol abuse, or by prescription or non-prescription drugs. For example, such liver disease caused by excessive doses of acetaminophen has recently been noted in the press.

The Invention

UW–Madison researchers have developed an excellent transgenic mouse model for human liver disease. They used a genetic construct comprising the albumin gene regulatory element linked to the herpes simplex thymidine kinase gene to create the mouse. When an inducing agent, such as the drug gancyclovir, is administered to the mouse, it develops liver disease.

Applications

- Provides a means of testing therapies to prolong survival in humans with liver disease

Key Benefits

- Liver disease in the mouse closely mimics human liver disease
- Superior to existing mouse models of liver disease

Additional Information

For More Information About the Inventors

- Eric Sandgren

Tech Fields

- Research Tools : Animal & disease models

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854