

Wisconsin Miniature Swine™ for Biomedical Research



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WARF: P130271US01

Assigned to WARF as biological material.

The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in a breed of swine ideally suited for preclinical research and the development of novel genetic models of human disease.

OVERVIEW

Rodents and other small animals are extensively used as models to study human health and disease, but there are increasing concerns about their relevance. Research funding and regulatory agencies are beginning to demand that large translational animal models be used instead, especially for studies pertaining to the development/validation of diagnostic and therapeutic technologies.

Swine are well suited for these studies given their genetic proximity to humans and similarities in anatomy, body function and diet. However, years of selective breeding for meat production has resulted in fast-growing, muscular swine. Such conventional breeds are unsuitable for modeling human physiology and disease.

THE INVENTION

UW-Madison researchers have developed a novel line called “Wisconsin Miniature Swine,” or WMS, that is well suited to biomedical research and genetic modeling of human diseases. The animals’ body weight, size and composition are similar to humans and can be manipulated easily. For example, on an unrestricted feeding regimen, WMS become obese and appear to develop the hallmarks of metabolic syndrome.

APPLICATIONS

- Swine breed for biomedical research, preclinical testing and genetic modeling of human disease

KEY BENEFITS

- Weight, size and composition are similar to humans and easily manipulated.

THE WARF ADVANTAGE

Since its founding in 1925 as the patenting and licensing organization for the University of Wisconsin-Madison, WARF has been working with business and industry to transform university research into products that benefit society. WARF intellectual property managers and licensing staff members are leaders in the field of university-based technology transfer. They are familiar with the intricacies of patenting, have worked with researchers in relevant disciplines, understand industries and markets, and have negotiated innovative licensing strategies to meet the individual needs of business clients.



- Friendlier and easier to work with than conventional breeds
- Maintained in a special pathogen-free facility

STAGE OF DEVELOPMENT

The WMS line was created in 2010 and is maintained in the University of Wisconsin's pathogen-free swine facility.

ADDITIONAL INFORMATION

Related Technologies

[WARF reference number P140228US01 describes a sub-line of Wisconsin Miniature Swine that are hypercholesterolemic and ideal for studying cardiovascular disease.](#)

Tech Fields

Research Tools - Animal models

Drug Discovery - Disease models

CONTACT INFORMATION

For current licensing status, please contact Mark Staudt at mstaudt@warf.org or 608-960-9845.

