
FOR IMMEDIATE RELEASE**TEXAS INSTITUTE FOR GENOMIC MEDICINE ANNOUNCES DISCOVERY
THAT COULD LEAD TO NEW UNDERSTANDING OF COMMON BIRTH DEFECT*****Gene Pathway may be involved in spina bifida***

Houston, Texas, September 12, 2005 – The Texas Institute for Genomic Medicine announced today that researchers associated with the Institute and Lexicon Genetics Incorporated have discovered that defects in the FKBP8 gene may play a role in spina bifida, a common birth defect affecting the lower spinal column. Richard H. Finnell, Ph.D., interim director and president of the Texas Institute for Genomic Medicine, presented this finding at the 4th International Workshop on Neural Tube Defects on Saturday, September 10, 2005 in Palm Springs, California. Dr. Finnell's presentation is entitled "FKBP8 – A new mouse model of spina bifida."

There are approximately 70,000 people in the United States living with spina bifida, the most common permanently disabling birth defect. Spina Bifida is a neural tube defect that occurs in the first month of pregnancy when the spinal column does not close completely. It can result in full or partial paralysis of the legs and lower body, bladder and bowel control difficulties, learning disabilities and depression. At present, the primary means of preventing this birth defect is through maternal dietary supplementation with multivitamins containing folic acid.

"This finding has the potential to lead to the prevention of spina bifida and improve the quality of life for the many thousands of people living with this debilitating disease," said Dr. Finnell. "It is just one example of the ability of the OmniBank library of mouse embryonic stem cell clones to illuminate the functions of genes. We believe that researchers accessing this valuable resource through the Texas Institute for Genomic Medicine will accelerate the pace of scientific discoveries related to human healthcare."

Through the creation of mice with an altered FKBP8 gene that functions at reduced levels, scientists have discovered a model for spina bifida that could provide new insight into the human disease. Existing disease models focus on folic acid and the folate pathway genes. This new model demonstrates 100% penetrant lesions comparable to the human form of the disease. As a result, it is expected to improve understanding of the gene pathways involved in normal and abnormal neural tube closures, with the goal of ultimately preventing and treating spina bifida. Researchers at the Institute for Genomic Medicine are beginning to screen human DNA samples for occurrence of this gene defect in order to correlate their findings with spina bifida in the human population.

About the Texas Institute for Genomic Medicine

The Texas Institute for Genomic Medicine is a non profit institute created under an award from the Texas Enterprise Fund to pioneer the development of life-changing medical breakthroughs, accelerate the pace of medical discoveries and foster the development of the biotechnology industry in Texas. Using its patented gene knockout technologies, Lexicon Genetics is creating for the Institute a comprehensive knockout mouse embryonic stem cell library containing 350,000 cell lines. When complete, the new library is expected to be the world's largest collection of mouse embryonic stem cells that have been engineered for the study of gene function, allowing researchers to identify genes that could lead to advancements in human healthcare. The Institute will make cells from its library available to researchers

worldwide. It is based in Houston at the Texas A&M System Health Science Center's Institute of Biosciences and Technology and in College Station at Texas A&M University.

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