

## **FOLDRX ANNOUNCES STUDY DEFINING ROLE OF KEY PROTEIN AND BIOLOGICAL PATHWAY IMPLICATED IN PARKINSON'S DISEASE**

-- Collaborators' research in *Science* points way to new treatment approaches and validates Company's discovery engine --

June 22, 2006

**Cambridge, MA, June 22nd, 2006** - FoldRx Pharmaceuticals, Inc. announced today the publication of a study by Susan Lindquist and collaborators that defines the role of a key protein and biological pathway implicated in Parkinson disease. The research, which appears in the online edition of *Science*, advances the understanding of Parkinson disease and points the way toward new treatment approaches. The study also underscores the potential of the yeast-based model FoldRx is using as a discovery engine for drugs to treat complex neurodegenerative diseases.

There is accumulating evidence that a protein called alpha-synuclein plays a key role in the death of dopamine producing nerve cells and contributes to the development of Parkinson disease. However, to date, the normal role of this protein as well as its function in causing disease has not been understood.

"In our research, separate cell biology and genetic studies in yeast both converged to demonstrate that excess levels of alpha-synuclein inhibit protein transport between two organelles within the cell, the endoplasmic reticulum (ER) and Golgi apparatus, resulting in cell death. This trafficking pathway provides new therapeutic targets for small molecule drugs," said Susan Lindquist, Ph.D., Howard Hughes Investigator, Member of the Whitehead Institute for Biomedical Research, Professor of Biology at Massachusetts Institute of Technology, and the study's senior author. Dr. Lindquist is also a scientific founder of FoldRx.

In addition, genetic studies demonstrate that modulating the ER to Golgi transport pathway alters alpha-synuclein toxicity. Expression of the protein Rab1a, a key positive regulator of ER to Golgi transport, prevented alpha-synuclein induced death of dopamine-producing neurons in two different animal models of Parkinson disease-fruit flies (*D. melanogaster*) and nematodes (*C. elegans*). Remarkably, in experiments using rat embryonic nerve cells transfected with alpha-synuclein, Rab1a selectively rescued dopamine-producing neurons, the cells most at risk in Parkinson disease.

Richard Labaudinière, Ph.D., President and Chief Executive Officer of FoldRx followed by saying, "FoldRx is actively pursuing small molecule drugs to treat Parkinson disease and other neurodegenerative disorders. This link between ER and Golgi trafficking and alpha-synuclein toxicity discovered in this elegant research will help us to further develop the lead candidates in our Parkinson disease program."

He added that, "FoldRx is applying the high throughput, yeast-based screening system pioneered by Dr. Lindquist in its discovery programs. This research underscores the utility of our yeast-based discovery engine in studying complex neurodegenerative diseases and in identifying disease-relevant drug targets and drug candidates."

FoldRx holds an exclusive license from the Whitehead Institute to the intellectual property filed on this yeast-based screening system and has used this discovery in the identification of novel targets and the characterization of its lead series of compounds.

### **About FoldRx Pharmaceuticals, Inc.**

FoldRx Pharmaceuticals is a development-stage biotechnology company focusing on first-in-class disease-modifying small molecule therapeutics to treat diseases of protein misfolding and aggregation (amyloidosis). Protein misfolding is increasingly being recognized as an underlying cause of many chronic degenerative diseases. By applying FoldRx's proprietary expertise in protein folding and its platform for drug and target discovery, the company is building a pipeline, initially for hereditary amyloidosis and neurodegenerative diseases. FoldRx's initial pipeline includes a program in clinical development to treat two genetic diseases, Familial Amyloid Polyneuropathy (FAP) and Familial Amyloid Cardiomyopathy (FAC), and a discovery program in Parkinson disease, based on its broad, proprietary yeast-based drug discovery platform. FoldRx was cofounded by Jeffery W. Kelly and Susan Lindquist at The Scripps Research Institute and the Whitehead Institute, respectively. For

more information on FoldRx, please visit the company's web site at [www.foldrx.com](http://www.foldrx.com).