

# BIO WORLD<sup>®</sup> TODAY

MONDAY  
DECEMBER 12, 2005

THE DAILY BIOTECHNOLOGY NEWSPAPER

VOLUME 16, No. 236  
SPECIAL REPRINT

## Private Money, Grants Funding Edison's Mitochondrial Pipeline

By Jennifer Boggs  
Staff Writer

Founded earlier this year to capitalize on oxidation-reduction encryption technology for developing drugs to treat inherited mitochondrial diseases, Edison Pharmaceuticals Inc. last month brought in its first funding – \$6.2 million through a Series A round and foundation grants.

The San Jose, Calif.-based company intends to start working in several orphan respiratory chain diseases for which there are no existing therapies, including Friedreich's ataxia, Leber's hereditary optical neuropathy, and mitochondrial encephalomyopathy, lactic acidosis and stroke-like symptoms (MELAS.)

"We plan to begin by focusing on those initial indications," said Guy Miller, president and CEO of Edison. Later on, the company hopes to "leverage the data we get from those initiatives to design molecules targeting non-orphan indications that have similar disease mechanisms."

Respiratory chain diseases refer to afflictions caused by genetic mutations that occur in the nuclear or mitochondrial genome, resulting in protein defects within the subunits contained in the respiratory chain, Miller said.

"There are now more than 40 identified diseases that are genetically passed on, and the list is growing," he told *BioWorld Today*, with "conservative" estimates of 100,000 children in the U.S. with respiratory chain diseases. "There are no therapies today, and in many instances, these diseases are highly debilitating or life-threatening."

Miller, who co-founded Edison in February, previously headed Galileo Pharmaceuticals Inc., a Santa Clara, Calif.-based company that targets oxidation-reduction (redox)-signaling pathways to develop drugs for neuro-inflammatory and inflammatory indications. While at Galileo, the focus was on large disease markets, but "we had a magnificent technology platform" and "wonderful assets on the shelf" that could be used to treat the smaller orphan indications, Miller said.

And, as a practicing physician at Stanford University School of Medicine who still sees patients each week, he added, "I liked so much about what I was hearing on the technology side, that I became enchanted by the chance to make a difference in the lives of children with these diseases."

Edison's work with academic institutions and foundations enabled the company to access \$3.4 million in grant money from the Friedreich's Ataxia Research Alliance, the Muscular Dystrophy Association and Seek A Miracle. Those funds served as a "cornerstone" for the company's Series A round, which brought in an additional \$2.8 million, for the \$6.2 million total, said Miller, adding that the company hopes to announce another grant award within the next few weeks.

In addition to the financing, Edison also has two agreements with Galileo to transfer a set of molecules called the EPI-A0001 series and gain access to Galileo's screening platform. In exchange, Galileo obtained an undisclosed equity stake in Edison, and Peter Morris, of Galileo, assumed a seat on Edison's board. Edison also appointed Paul Avery, who led the financing round, and Hamilton Moses, of the Alerion Institute in North Gardens, Va., to the board.

Right now, Edison has four employees, plus "an extended family" of about 15 ancillary members, including science advisers, Miller said. "We hope to grow to 15 actual employees during 2006," as the first product, EPI-A0001 moves closer to the clinic.

EPI-A0001 is expected to begin Phase I testing late next year. A second compound, coming from the EPI-B series, could begin clinical testing in 2007. Both candidates are redox-encryption molecules, designed to recognize altered redox centers, facilitate electron transfer and improve biological function.

"I envision Edison being the leader for these orphan drug indications," Miller said. "Within the next two years, we hope to have positive proof-of-principle studies that will validate the redox technology."

After starting in the inherited orphan indications, Edison anticipates evaluating its platform in non-orphan applications, both genetic and acquired. Miller said the interest lies primarily in neurological and neuromuscular diseases – Parkinson's, Huntington's and ALS – and metabolic diseases, such as diabetes.

Edison likely will commercialize drugs in the small orphan markets on its own, but plans to partner the larger indications. ■