Semiconductor tools for DNA analysis.

60 Clifford St.
Providence, RI 02903
http://nabsys.com

Fast Facts

Founders:	Xinsheng Sean Ling
Date Founded:	2004
Employees:	47
Headquarters:	Providence, RI
Revenue:	N/A
University:	Brown University
Federal Funding Agency:	National Science Foundation
Initial Research Funding:	$1.5M

Nabsys is pioneering the development of positional sequencing, a novel technology with broad applicability for DNA analysis. The Nabsys platform uses solid-state nanodetectors to analyze single DNA molecules, revealing both location and identity of DNA sequences over long distances. The system is designed to set new standards for accuracy, speed and scalability, offering compelling advantages for the analysis of genome structural variation, genome mapping, and both targeted and whole genome sequencing. The company is dedicated to enabling advances in life sciences and healthcare through deployment of its novel positional sequencing platform.

The company was the first to receive a "$1,000 Genome" award from the National Human Genome Research Institute of the National Institutes of Health for the development of an electronic approach to DNA sequencing. Nabsys has raised $21 million in venture financing since 2009.

The Story Behind the Company

Xinsheng Sean Ling, a professor of physics at Brown University, was instrumental in the founding of Nabsys. Nabsys is developing a technology that builds off Ling's research. By combining solid-state systems with innovations in chemistry, the technology can sequence and analyze DNA at a much lower cost and greater speed than existing technologies. The initial research and development was undertaken at Brown University with a grant from the Division of Materials Research at the National Science Foundation to develop a low-cost table-top nanofabrication technique that could be used for DNA sequencing.

3 Davol Square, A301
Providence, RI 02903
www.tivorsan.com

Fast Facts

Founders:	Justin Fallon
Date Founded:	2008
Employees:	6
Headquarters:	Providence, RI
Revenue:	N/A
University:	Brown University
Federal Funding Agency:	National Institutes of Health National Science Foundation
Initial Research Funding:	N/A

Tivorsan Pharmaceuticals is a protein therapeutics company pioneering a unique approach to treat serious neuromuscular disorders, including Duchenne's Muscular Dystrophy (DMD) and Becker Muscular Dystrophy (BMD).

The Story Behind the Company

Tivorsan's treatment method, using recombinant human biglycan (rhBGN), is based on 24 years of basic science work in the Fallon Laboratory at Brown University. Dr. Justin Fallon, professor at Brown, is the primary inventor of the biglycan-related technology. While at Brown, Dr. Fallon was working to develop a novel therapy for Duchenne's muscular dystrophy, which strikes one in 3,000 boys. In previous work researchers characterized a new extracellular component of the dystrophin complex, a critical ensemble of proteins that is defective in people with this disease. Dr. Fallon's research indicated that this component, biglycan, is important for signaling at both the neuromuscular junction and at the dystrophin complex. The efficacy of biglycan is currently being tested in mouse models with Duchenne's Muscular Dystrophy.

Tivorsan was formed by Dr. Fallon in collaboration with colleagues from Old Forge Holdings, LLC of Greenwich, CT and LifeTech Research, Inc, a Baltimore, MD-based technology research and development firm. Twenty-four years of basic research funding from the National Institutes of Health laid the groundwork for this Tivorsan's formation. Funding from the National Science Foundation to support graduate fellowships in the Fallon Lab also played an important role, as well as early support from philanthropic sources to help find a cure for DMD.