

## **BGN News**

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# A BGU technology was licenced to Lauren Sciences, and awarded MJFF grant to develop a V-Smart Therapeutic for parkinson's disease

Lauren Sciences LLC, a privately-held biotechnology company furthering development of its new V-Smart<sup>TM</sup> nanovesicle platform technology, based on invention originate from Ben-Gurion University, announced today the award of a grant from The Michael J. Fox Foundation for Parkinson's Research (MJFF). The grant from MJFF will support development of the novel V-Smart<sup>TM</sup> nanovesicles for systemic, targeted delivery of GDNF (glial-derived naturetic factor) across the blood brain barrier (BBB) to the brain for treatment of Parkinson's disease.

"We thank The Michael J. Fox Foundation for this award," said Susan Rosenbaum, Esq., Chairman and Chief Executive Officer of Lauren Sciences. "The MJFF award provides significant recognition of our innovative V-Smart<sup>TM</sup> drug delivery system and its strong potential to transform the treatment of Parkinson's disease with an effective therapeutic that overcomes the historical challenge of developing drugs that cross the blood brain barrier."

"One of our Foundation's major goals is to find a disease-modifying therapy for PD," said Todd Sherer, PhD, CEO of MJFF. "Trophic factors, natural neuroprotective and regenerative proteins which do not get into the brain by existing oral or intravenous delivery, have shown the potential to do just this, by protecting the dopamine cells that die during the course of the disease. The challenges associated with the delivery of trophic factors therefore represent a critical unmet need in the field of PD research."

"Our pre-clinical studies demonstrate that novel nano-sized V-Smart<sup>TM</sup> vesicles encapsulate small molecules, peptides, proteins and nucleic acids, cross the BBB and release their encapsulated contents in the brain," said Eliahu Heldman, Ph.D., Chief Scientific Officer of Lauren Sciences LLC. "Our goal is to target, protect and restore dopaminergic neurons (nerve cells) in the brain that deteriorate during the course of Parkinson's disease. The success of this project should improve Parkinson's patients' lives."

#### About the V-Smart<sup>TM</sup> Platform

V-Smart<sup>TM</sup> is a platform technology that can be used for a variety of uses including delivery of therapeutic drugs. The V-Smart<sup>TM</sup> drug delivery system is based on novel nanovesicles that have unique superiority to other nanovesicles, such as liposomes. Major advantages of the V-Smart<sup>TM</sup> vesicles include: high stability, large capacity, ability to carry many kinds of drugs across the BBB, potential to target specific cells, controlled release of encapsulated drugs at targeted sites and systemic delivery.

#### **About Lauren Sciences LLC**

Lauren Sciences LLC is a privately-held biotechnology company focused on using it V-Smart<sup>TM</sup> platform to create a robust pipeline of therapeutics consisting of central nervous system (CNS)-active drugs that normally do not cross the BBB. The company's lead program is for Parkinson's disease. Additional programs are expected to include other CNS disorders, such as Alzheimer's, GBM (brain cancer), ALS (Lou Gehrig's disease) and neuro-HIV, among others. Lauren Sciences exclusively licensed the V-Smart<sup>TM</sup> technology platform and intellectual property estate from B.G. Negev Technologies, the technology transfer company of Ben-Gurion University, Israel, where the company's Chief Scientific Officer, Dr. Eliahu Heldman, is Professor Emeritus and he, with Drs. Sarina Grinberg and Charles Linder, developed the V-Smart<sup>TM</sup> technology.

#### **About Parkinson's Disease**

Over one million people in the US suffer from Parkinson's disease, a disorder of the CNS resulting from loss of cells in various parts of the brain. The current standard of care is based mostly on drugs that alleviate symptoms but do not cure the disease. The efficacy of these drugs diminishes with time and patients develop motor



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fluctuations that negatively affect their quality of life. GDNF might be able to restore function of degenerating dopamine-producing-cells and thus retard progression of the disease and even reverse the course of the disease.

#### About The Michael J. Fox Foundation for Parkinson's Research

As the world's largest private funder of Parkinson's research, The Michael J. Fox Foundation is dedicated to accelerating a cure for Parkinson's disease and improved therapies for those living with the condition today. The Foundation pursues its goals through an aggressively funded, highly targeted research program, and has invested over \$275 million in research to date. <a href="https://www.michaeljfox.org">www.michaeljfox.org</a>.

#### **About Ben-Gurion University of the Negev**

BGU is internationally-recognized for its unique pioneering spirit that combines outstanding academics and research with a commitment to the community. With more than 20,000 students, five Faculties and a number of internationally-acclaimed research institutes, the University has become a world leader in interdisciplinary research in cutting-edge fields that range from desert studies to communication, from nano technologies to biotechnology

