

Nur Exone Biologic

Architects of Tomorrow's Regenerative Medicine Breakthroughs

I am most proud of building a team of passionate individuals who share a common vision.



magine a future where science picks up where nature leaves off—where a groundbreaking treatment regenerates damaged nerves, restoring movement after spinal cord injuries and reversing vision loss from optic nerve damage. This isn't science fiction; it's the future that biotechnology and regenerative medicine are striving to create. Transformative breakthroughs emerge at the crossroads of bold vision and relentless dedication, turning ambitious ideas into revolutionary therapies. Innovation alone isn't enough—it takes commitment to navigate scientific and regulatory challenges and bring these lifechanging treatments to patients.

At the heart of the NurExone journey is a compelling story of discovery. Professor Shulamit Levenberg, a leading scientist from Israel's Technion—often considered the country's equivalent of the Massachusetts Institute of Technology (MIT)—and Professor Dani Offen of Tel Aviv University recognized the potential of exosomes for spinal cord healing. Seeing the commercial potential of this breakthrough, serial entrepreneur Yoram Drucker set out to build a company around it. Mr. Drucker, with a track record of transforming cutting-edge scientific discoveries into successful ventures, had previously collaborated with Professor Offen on groundbreaking companies including EggXYT and Brainstorm Cell Therapeutics. He recruited Dr. Lior Shaltiel, an accomplished scientist with a deep passion for engineering, medicine, and translational research.

With a background in chemical engineering and a focus on drug delivery systems, Dr. Shaltiel initially worked with synthetic liposomes before pivoting to the promising world of natural extracellular vesicles—exosomes. Today, as CEO of NurExone, he leads a team dedicated to translating research into real-world treatments that could redefine regenerative medicine.

A Team Driving Innovation

NurExone's success is the result of a collective effort by a multidisciplinary team pushing the boundaries of what's possible in regenerative medicine. As a spin-off from the Technion, the company was founded on pioneering research into exosome-based therapies, leveraging these natural biological carriers to develop a platform for targeted drug delivery. Under Dr. Shaltiel's leadership, NurExone has evolved into a publicly traded entity in Canada, advancing innovative therapies while maintaining a strong focus on collaboration.





In parallel, the company has strengthened its operational capacity with key initiatives. The acquisition of an exclusive Master Cell Bank ensures a stable and independent exosome supply for its drug pipeline and future partnerships. Additionally, the launch of ExoTop, a U.S.-based subsidiary focused on exosome production, positions NurExone for expansion in global market.

Overcoming Scientific and Regulatory Hurdles

Innovating in biotech means navigating complex scientific and regulatory landscapes. NurExone has built a strong regulatory team to ensure that its cutting-edge therapies can progress smoothly toward clinical applications. Dr. Ina Sarel, a biotechnology executive with over 20 years of experience in product development, leads these efforts. Her expertise in stem and progenitor cell therapy, combined with her deep understanding of regulatory frameworks, has been instrumental in guiding NurExone's clinical strategy. By establishing early and strong relationships with regulatory agencies, NurExone is strategically positioned to streamline its path to approval.

Dr. Tali Kizhner, Head of R&D, plays a crucial role in developing NurExone's groundbreaking products. With over 15 years of experience in therapeutic protein and biopharmaceutical development, Dr. Kizhner ensures that the company's research remains both innovative and scalable. Her leadership has helped NurExone translate its exosome platform into a versatile tool for treating conditions beyond spinal cord injury, including degenerative eye diseases.

Igniting Transformative Advances

Dr. Shaltiel sees enormous potential for innovation emerging from Israel in the coming years. He highlights a unique dynamic in which hundreds of thousands of engineers, scientists, PhD students, and tech executives have served in reserve duty, gaining firsthand exposure to healthcare challenges in complex situations. He believes that this experience will fuel substantial advancements in biotech, medtech, and regenerative medicine. He also expresses hope for peace in the region, which would enable greater collaboration across borders and cultures, ultimately accelerating medical breakthroughs.

His own journey in biotech has been shaped by inspiring mentors and pioneering scientists. Early on, he was deeply influenced by Professor Robert S. Langer of MIT, a global leader in biomedical engineering whose work laid the foundation for many modern medical innovations. Professor Langer's relentless pursuit of translating scientific discoveries into real-world therapies resonated with Dr. Shaltiel, reinforcing his own drive to push the boundaries of medicine. Personal experiences—seeing the impact of medical advancements on patients' lives—have further fueled his commitment to bringing transformative therapies to market.

Envisioning a Healthier Future

For Dr. Shaltiel, a great achievement in his journey with NurExone has been assembling a team of talented and passionate individuals who share a unified vision. Their collective dedication and expertise are what drive the company forward, ensuring that scientific innovation is always aligned with real-world patient needs. Beyond NurExone's advancements in regenerative medicine, the company's contributions to the broader scientific community—including research publications, industry collaborations, and partnerships with leading institutions—reinforce its role as a leader in the field.

His long-term vision is to help usher in a new era of neuron regeneration, where central nervous system diseases and injuries no longer dictate a person's quality of life. Early successes in spinal cord injury and optic nerve regeneration provide hope that this goal is within reach. While the challenge is immense, he believes that even incremental progress—small steps toward functional recovery—can represent a breakthrough for millions of patients.

For those looking to make an impact in biotech, Dr. Shaltiel's advice is clear: stay curious, keep learning, and develop both scientific and business acumen. He emphasizes the value of understanding business strategy, whether through hands-on experience or formal education like an MBA. In an industry that is constantly evolving, staying ahead requires building strong networks, finding mentors, and embracing adaptability. The path to success is rarely linear, but those who remain committed to their vision will ultimately shape the future of medicine.

The Road Ahead

NurExone Biologics continues to make strides in regenerative medicine, leveraging its exosome-based technology to develop groundbreaking therapies. The company has received a prestigious Eureka grant for its collaboration with the Canadian company Inteligex, aiming to combine its exosome technology with Inteligex's stem







VENTURE 5

2025

6

The potential to make a meaningful difference in people's lives is a profound motivator for me.

Our work in fields with no current therapeutic solutions, enhanced by scientific advancements, is what drives us forward.

9

cell-based therapy for chronic spinal cord injury.
Recognized by the scientific community, its
researchers—led by globally recognized scientists like
Professor Shulamit Levenberg—are driving forward the
next generation of biologics.

With a clear vision, a strong leadership team, and a relentless pursuit of innovation, NurExone is redefining what's possible in regenerative medicine. The company's pioneering work in exosome-based drug delivery holds the potential to transform treatment paradigms for some of the most challenging medical conditions. As it continues to push the boundaries of science, NurExone remains focused on the ultimate goal: bringing life-changing therapies to patients worldwide.

