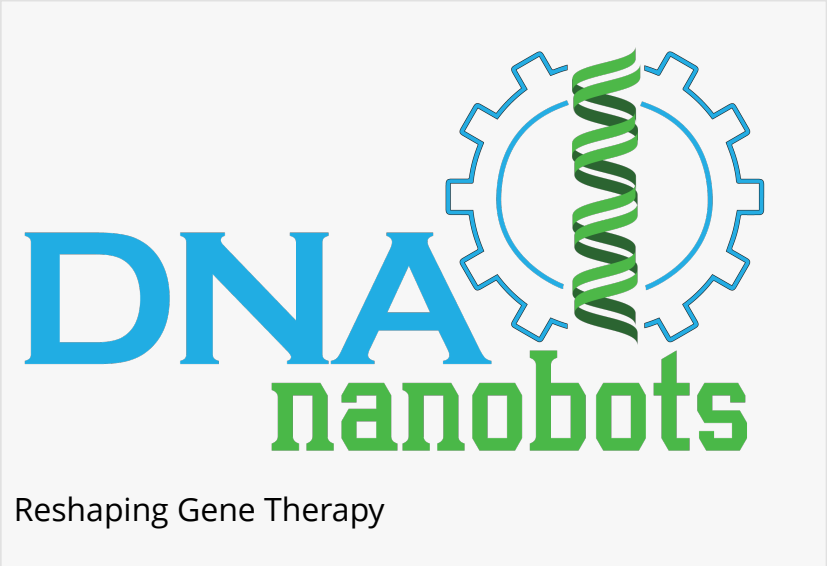
# DNA Nanobots Receives SBIR Grant to Advance Revolutionary Non-Viral Gene Therapy Platform

*Backed by NIH, DNA Nanobots aims to disrupt gene therapy with scalable, non-viral platform—$5M round now open to select investors.*




POWELL, OH, UNITED STATES, September 11, 2025 / EINPresswire.com/ -- DNA Nanobots, Inc., a pioneering biotechnology company focused on next-generation gene delivery systems, announced today that it has received a Phase I Small Business Innovation Research (SBIR) grant from the National Institute of General Medical Sciences (NIGMS) of the National Institutes of Health (NIH). The award, numbered 1R43GM161180, will support development of the company's proprietary non-viral gene therapy platform, which enables tissue-specific, payload-unrestricted, and re-dosable delivery for a wide range of therapeutic indications.

> We're at a pivotal moment, with platform validation and NIH support, we seek mission-aligned partners and investors who share our vision for programmable, re-dosable, non-viral gene therapy."
>
> *James Lynch, CEO of DNA Nanobots*

The SBIR award recognizes DNA Nanobots' innovative approach to addressing critical limitations in current gene therapy. Most gene therapies rely on viral vectors, which impose strict size limits on therapeutic payloads, carry risks of immunogenicity, and typically restrict the ability to re-dose. The DNA Nanobots platform overcomes these barriers through programmable DNA nanostructures designed to target specific tissues and deliver large, complex payloads—including full-length genes—with the potential for safe repeat dosing.

"This SBIR award validates our vision of transforming gene therapy through precision delivery systems," said James Lynch, CEO of DNA Nanobots. "Our

platform represents a paradigm shift in how we approach gene therapy, offering unprecedented flexibility and safety by eliminating the constraints of viral vectors while maintaining therapeutic efficacy across diverse medical indications."

The funded work will focus on in vivo validation of DNA Nanobots' delivery system, including targeted biodistribution, payload expression, and biocompatibility testing. The company has already begun to demonstrate promising delivery and expression in early-stage mouse studies and is rapidly building preclinical data across multiple therapeutic areas. "The ability to deliver gene therapy without viral vectors while maintaining tissue specificity opens up entirely new therapeutic possibilities," said Chris Lucas, Chief Scientific Officer of DNA Nanobots. "This SBIR funding will accelerate our efforts to demonstrate the platform's versatility across multiple disease areas, from rare genetic disorders to more common conditions that could benefit from targeted gene therapy approaches."

The company's DNA origami-based platform is designed for flexibility. It can be tuned to accommodate large or complex genetic constructs, including full-length genes, and adapted to engage different cell types or receptors depending on the therapeutic need. The technology's re-dosable nature and lack of viral components may also help mitigate regulatory hurdles related to immunogenicity and long-term toxicity.

Building Momentum in 2025

The SBIR award adds to a year of strong momentum for DNA Nanobots. In 2025, the company successfully initiated preclinical testing of its lead candidate for muscular dystrophy, completed scale-up of its scaffold production pipeline, and built a team with deep expertise in synthetic biology, gene therapy, and nanofabrication. With this NIH funding, the company is now positioned to take its platform to the next level and generate the kind of data required to de-risk further investment and set the stage for clinical translation of its lead therapeutic, a full-length dystrophin delivery vector.
To support this progress, DNA Nanobots is currently raising a $5 million seed round. The funding will be used to expand in vivo studies, develop GMP-compatible manufacturing processes, and advance strategic partnerships.

"We're at a pivotal moment," Lynch said. "With our foundational IP in place, platform validation underway, and now NIH support, we're seeking mission-aligned investors and partners who see the value in a programmable, non-viral gene delivery system that can scale across indications. This is a unique opportunity to help reshape the future of gene therapy." Gary Booth, Board Member of DNA Nanobots, added: "This talented team is finding solutions to the most vexing problem in Biotech, which is delivering therapeutic materials, including genes, into the cell without using viral vectors. We have vast genetic knowledge which can now be unleashed in cost-effective therapies."

Interested investors and collaborators are encouraged to contact the company directly. DNA Nanobots is headquartered in Powell, Ohio and supported by a growing network of strategic partnerships, federal research funding, and private investment.

About DNA Nanobots, Inc.

DNA Nanobots, Inc. is a biotechnology company focused on developing innovative non-viral gene delivery platforms. The company's proprietary technology enables tissue-specific, payload-unrestricted, and re-dosable gene therapy solutions for a wide range of medical indications. For more information, visit www.dnananobots.com.

Funding Disclosure

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