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Nanotools Bioscience Awarded Competitive Grant from the National Science Foundation

Small Business Innovation Research Program Provides Seed Funding for Nanomaterials R&D

San Diego, CA– Nanotools Bioscience has been awarded a National Science Foundation (NSF) Small Business Innovation Research (SBIR) grant for \$225,000 to conduct research and development (R&D) work on the development of revolutionary nanotechnology-based cell culture microplates that will allow the introduction of novel disruptive optical stimulation technology into drug discovery screening assays.

By incorporating graphene materials, Nanotools Bioscience proposes to develop specialized optoelectronic microtiter plates engineered to provide dynamic optical stimulation of genetically intact cells during high-throughput screening drug discovery campaigns. Our proprietary microplate-mediated optical stimulation technology can be combined with optical monitoring of cellular activity in minimally-invasive all-optical screening assays with increased information content and enhanced predictive values. The proposed cell stimulation technology will improve the efficiency of drug discovery, and lead to more promising drug candidates with a wide range of mechanisms of actions, while simultaneously reducing the development costs.

“The National Science Foundation supports small businesses with the most innovative, cutting-edge ideas that have the potential to become great commercial successes and make huge societal impacts,” said Barry Johnson, Director of the NSF’s Division of Industrial Innovation and Partnerships. “We hope that this seed funding will spark solutions to some of the most important challenges of our time across all areas of science and technology.”

Dr. Elena Molokanova, CEO and Founder of Nanotools Bioscience, said that the SBIR grant reflects NSF’s confidence in the potential impact of this technology on the drug discovery industry. NSF funds will allow Nanotools Bioscience to accelerate critical quality testing, and help deliver the improved plates to pharmaceutical companies around the world. Dr. Molokanova hopes that improved drug discovery tools will stimulate additional technological innovations across the industry and increase the availability and accessibility of therapeutic solutions.

About the National Science Foundation's Small Business Programs: The National Science Foundation (NSF) awards roughly \$200 million annually to startups and small businesses through the Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) program, transforming scientific discovery into products and services with commercial and societal impact. The non-dilutive grants support research and development (R&D) across almost all areas of science and technology helping companies de-risk technology for commercial success. The NSF is an independent federal agency with a budget of about \$7

billion that supports fundamental research and education across all fields of science and engineering.

Once a small business is awarded a Phase I SBIR/STTR grant (up to \$225,000), it becomes eligible to apply for a Phase II grant (up to \$750,000). Small businesses with Phase II grants are eligible to receive up to \$500,000 in additional matching funds with qualifying third-party investment or sales. NSF accepts Phase I proposals from small businesses twice annually in June and December. Small businesses with innovative science and technology solutions, and commercial potential are encouraged to apply. All proposals submitted to the NSF SBIR/STTR program undergo a rigorous merit-based review process. To learn more about the NSF SBIR/STTR program, visit: www.nsf.gov/SBIR.

Forward-Looking Statement: *This press release contains forward-looking statements, which are generally statements that are not historical facts. Forward-looking statements can be identified by the words "expects," "anticipates," "believes," "intends," "estimates," "plans," "will," "outlook" and similar expressions. Forward-looking statements are based on management's current plans, estimates, assumptions and projections, and speak only as of the date they are made. We undertake no obligation to update any forward-looking statement in light of new information or future events, except as otherwise required by law. Forward-looking statements involve inherent risks and uncertainties, most of which are difficult to predict and are generally beyond our control. Actual results or outcomes may differ materially from those implied by the forward-looking statements as a result of the impact of a number of factors.*