



StabiLux Biosciences Awarded Competitive Grant from the National Science Foundation

America's Seed Fund Powered by NSF Provides Funding for R&D; Helps small businesses move innovations out of the lab and into the market

StabiLux Biosciences has been awarded a National Science Foundation (NSF) Small Business Technology Transfer (STTR) Phase II grant for \$600,000 to commercialize innovative technology by conducting research and development (R&D) work on [high-brightness fluorophores for multi-color flow cytometry](#).

StabiLux Biosciences, a Michigan Technological University (MTU) spin-off company, has developed proprietary, high-brightness fluorescence compounds (fluorophores). These compounds find applications in flow cytometry, a laser-induced fluorescence technique that can analyze thousands of cells per second. This efficient technique is important for clinical diagnosis, and research in the areas of immunophenotyping (detection of tumor marker, HIV etc), ploidy analysis (detection of chromosome content, a parameter of measuring cancer aggressiveness), STEM cell application, biosynthesis (detection of algae strains for biofuel production), and drug development (effects of drug on cellular signaling, viability etc.). Flow cytometry could simultaneously detect up to 30 different parameters with 30 color signals. However, due to the issues of spillover (signal overlap), and auto-fluorescence (background noise), the current technology enables two- to eight- color analysis to ensure accuracy. StabiLux's platform technology overcomes these limitations, allowing researchers to detect what was previously undetectable. Tests have shown brightness is at least 10x times better than anything in the industry.

“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 Division of Industrial Innovation and Partnerships at NSF. “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.”



<http://www.stabiluxbiosciences.com/index.html>

“We are honored to receive the Phase II award that supports our transition from the lab into the commercial market. StabiLux's products will significantly enhance the capabilities of flow cytometry in research and clinical testing. This will affect countless people's lives by providing reliable data to better understand diseases. We are very grateful to our program director, Dr. Ruth Shuman for her mentorship to reach this achievement,” said Nazmiye Yapici, Research Chemist in StabiLux and PI of the phase II project.

Small businesses can receive up to \$1.5 million in funding from NSF. Companies must first have received a Phase I award (up to \$225,000) to become eligible to apply for a Phase II grant (up to \$750,000) to further develop and commercialize the technology. 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.

Small businesses with innovative science and technology solutions, and commercial potential across almost all areas of technology are encouraged to apply. All proposals submitted to the NSF SBIR/STTR program undergo a rigorous merit-based review process. NSF's deadlines for Phase I small business proposals occur twice annually, in June and December.

To learn more about the NSF SBIR/STTR program, visit: seedfund.nsf.gov.

About the National Science Foundation's Small Business Programs: *America's Seed Fund powered by the National Science Foundation (NSF) awards nearly \$200 million annually to startups and small businesses, transforming scientific discovery into products and services with commercial and societal impact. Startups working across almost all areas of science and technology can receive up to \$1.5 million in non-dilutive funds to support research and development (R&D), helping de-risk technology for commercial success. America's Seed Fund is congressionally mandated through the Small Business Innovation Research (SBIR) program. The NSF is an independent federal agency with a budget of about \$7.5 billion that supports fundamental research and education across all fields of science and engineering.*