Sixth Wave and York University Successfully Pass Mitacs Accelerate Research Review

written by Raj Shah | September 22, 2021

September 22, 2021 (Source) – ***Point-of-need Microfluidic Biosensor for Detecting Airborne Viruses using Molecularly Imprinted Polymers: Towards COVID-19 Virus Monitoring***

Sixth Wave Innovations Inc. (CSE: SIXW) (OTCQB: SIXWF) (FSE: AHUH) ("**Sixth Wave**" or the "**Company**") is pleased to announce additional grant funding for its joint research project with York University. The grant will provide continuity by funding the retention of current Ph.D staff interns prior to another Natural Sciences and Engineering Research Council of Canada ("**NSERC**") proposal slated for submission prior to December 2021. "**Mitacs**" is a national, not-for-profit organization that has designed and delivered research and training programs in Canada for 20 years. Working with 70 universities, 6,000 companies, and both federal and provincial governments, **Mitacs** builds partnerships that support industrial and social innovation in Canada. The funding for the positions is not repayable.

Work to date has focused on designing a prototype of the Company's AMIP technology to detect pathogens in airborne, water, and wastewater environments. The collaboration is part of Sixth Wave's multi-pronged R&D approach to revolutionize virus detection by being able to test individual patients (home tests) as well as monitoring entire populations through proactive measures such as pathogen detection in a variety (buildings, ships, aircraft, etc.) of air handling systems (HVAC) and municipal wastewater treatment facilities.

Microfluid devices or lab-on-a-chip devices are promising platforms to achieve rapid and sensitive immunological detection of pathogenic microorganisms such as bacteria and viruses. Inside these sub-microliter reactors, sample and reagent consumption can be significantly reduced, and the reaction time for target immobilization and identification can be shortened from hours to minutes or less.

Molecularly imprinted polymers (MIPs) provide selective binding sites to specific cells used as imprinting templates during their fabrication. Over the past year, York University and Sixth Wave Innovation Inc. (SIXW) have used an NSERC-MITACS COVID Grant to develop MIP formulations that are appropriate and selective towards microorganisms. The research partners developed effective methods for coating microparticles and microelectrodes with MIPs and recently worked on integrating the microstructures into microfluidic sensors. The proposed research in this application aims to finalize the design of microfluidic sensors based on the above technologies. This approach will open a new window of interest in the exploration of novel molecular-recognition polymers in microfluidic biosensors.

The Company’s AMIPs technology allows for novel product configuration not possible with traditional testing techniques. As a result, AMIPs has greater stability and significantly less susceptibility to environmental variables such as heat, light, and other factors which may impact traditional testing methods. Sixth Wave is using its expertise in MIP technology to bring innovative products to market and address the insufficiencies of current technologies exposed by the COVID-19 global pandemic.

“*The grant provides the Company a significant opportunity to continue our research in conjunction with Dr. Pouya Rezai and his team at York University*” states Sherman McGill, Executive Vice-President, and Chief Development Officer for Sixth Wave.

Further, *“We greatly value our relationship and the ground-breaking research that is forthcoming as a result of collaborative efforts .”*

The Company is not making any express or implied claims that its product has the ability to eliminate, cure or contain the COVID-19 (or SARS-2 Coronavirus) at this time.

About Sixth Wave

Sixth Wave is a development stage nanotechnology company with patented technologies that focus on extraction and detection of target substances at the molecular level using highly specialized Accelerated Molecularly Imprinted Polymers (AMIPs). The Company is in the process of commercializing its Affinity™ cannabinoid purification system, as well as IXOS®, a line of extraction polymers for the gold mining industry.

Sixth Wave can design, develop, and commercialize MIP solutions across a broad spectrum of industries. The company is focused on nanotechnology architectures that are highly relevant for the detection and separation of viruses, biogenic amines, and other pathogens, for which the Company has products at various stages of development.

For more information about Sixth Wave, please visit our website at: www.sixthwave.com.

ON BEHALF OF THE BOARD OF DIRECTORS
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Cautionary Notes

This press release includes certain statements that may be deemed "forward-looking statements" including statements regarding the planned features, capacity, and performance of the AMIPs technology and the planned Air Monitoring System. All statements in this release, other than statements of historical facts, that address future events or developments that the Company expects, are forward-looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance, and actual events or developments may differ materially from those in forward-looking statements. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause the Company's actual performance and financial results in future periods to differ materially from any projections of future performance or results expressed or implied by such forward-looking statements. In particular, successful development and commercialization of the AMIPs technology are subject to the risk that the AMIPs technology may not prove to be successful in detecting virus targets effectively or at all, the uncertainty of medical product development, the uncertainty of timing or availability of required regulatory approvals, lack of track record of developing products for medical applications and the need for additional capital to carry out product development activities. The value of any products ultimately developed could be negatively impacted if the patent is not granted. The Company has not yet completed the development of a prototype for the product that is subject to its patent application and has not yet applied for regulatory approval for the use of this product from any regulatory agency.