Sixth Wave Announces Extension of SARS-CoV-2 Research Agreement with UofA and Li Ka Shing Institute of Virology

written by Raj Shah | March 18, 2021
March 18, 2021 (Source) — Sixth Wave Innovations Inc. (CSE: SIXW) (OTCQB: ATURF) (FSE: AHUH) ("Sixth Wave", "SIXW" or the "Company") is pleased to announce the extension of its research and development relationship with the University of Alberta ("UofA") and the Li Ka Shing Institute of Virology ("LKS"), pursuant to the development of the Company's Accelerated Molecular Imprinted Polymers ("AMIPs™") technology for the detection of the virus that causes COVID-19 (the "Virus").

As previously announced, SIXW established a Service Agreement with UofA and LKS to facilitate the development of AMIPs™ (the "Service Agreement"). The original contract provided for the continuation of the work through April 30, 2021 and included provisions for the imprinting of the Virus and early-stage validation testing. Please see SIXW Press Release dated November 23, 2020 for more information on AMIPs and the UofA/LKS Service Agreement.

Announcement of Extension of Service Agreement

Based on the success of the collaboration thus far, SIXW and UofA have now executed a no-cost extension of the Service Agreement. The extension provides for a continuity of our development work at the UofA/LKS through April, 30 2022, unless otherwise extended by mutual consent. The extension has no impact on the ownership of associated intellectual property

owned solely by SIXW for AMIPs.

The extension of the Services Agreement will enable continued laboratory work and analytics to establish a definitive version of a polymerized molecular imprint of the Virus via AMIPs technology (the "Definitive Imprint"). Once AMIPs™ achieves clinical efficacy targets, the Definitive Imprint will then form the basis of AMIPs™ virus detection products. The AMIPs™ polymer is expected to be useful in the manufacture of an extensive array of rapid, durable, and versatile virus detection tools, including handheld devices, wearables, and airborne detection tools (see SIXW Press Release dated April 3, 2020, for additional details of the proposed practical uses of AMIPs™).

The extended Research Agreement will additionally include optimization work designed to further authenticate and enhance the AMIPs design ("Optimization Testing"), as discussed below.

"This agreement extension is a result of the rapid early success in the development of AMIPs, the strong relationship developed between the organizations and continued support of the key researchers at the UofA," said Dr. Jon Gluckman, President and CEO of Sixth Wave. "Perhaps most remarkable is the short time frame in which the research team has delivered the COVID-19 AMIPs™ prototype ready for optimization. The entire process, from initial wet chemistry to the sensor prototypes now undergoing optimization, has been accomplished in approximately 90 days. This rapid turnaround is a testament to the responsiveness and versatility of AMIPs as a means of identifying novel, complex and ever-mutating pathogens. We're privileged to have the UofA/LKS on our team and look forward to continued success."

Announcement of Completion of Contract with NS COVID-19 Response Council

As previously reported, SIXW recently produced a first-generation molecular imprint of the Virus (the "Imprint"), thereafter commencing a series of validation tests to quantify the accuracy of the imprinting process (the "Validation Testing"). Using the preliminary results, improvements in the production and measurement processes were made toward generation of AMIPs™ which achieved definitive and quantifiable detection of COVID-19 virus as steps toward the Definitive Imprint (see SIXW press release dated March 9, 2021).

Initial Validation Testing is now considered complete and has successfully demonstrated the efficacy of the AMIPs prototype using a combination of Quartz Crystal Microbalance ("QCM") and Atomic Force Microscopy ("AFM") at the UofA laboratory in Edmonton. Achieving this goal officially completes the proof of concept and the Company's primary obligations under the contribution agreement awarded to SIXW by the Nova Scotia COVID-19 Response Council (the "Contribution Agreement" and the "Council", respectively).

Sixth Wave expresses its gratitude again to the Council for their support and will be briefing the Council as soon as schedules permit to officially complete the Agreement and determine if the Company's development path warrants additional participation. Please see SIXW press release dated October 27, 2020 for more information on the Contribution Agreement and associated requirements.

Forthcoming Optimization Testing

The forthcoming work at UofA which is ongoing and pursuant to the extension of the Research Agreement will focus on the optimization of the AMIPs prototype, within the following general categories of research:

1. Variant Testing - Testing and validating the current

- AMIPs™ detection capability for the major known variants of the COVID-19 virus.
- 2. Sensitivity and Selectivity Testing Initial validation was successfully demonstrated using a combination of QCM and AFM technologies, as discussed in prior announcements. The development team is now moving toward more sensitive measurement techniques including Quartz Crystal Microbalance with Dissipation Monitoring ("QCM-D") based on ring-down technique. QCM-D will allow more accurate measurement of detection limits and flexibility in evaluation of interferents that will be present in real-world samples. This effort will ensure that the Definitive Imprint will meet both detection limits and reliability at clinically acceptable levels.
- 3. Colorimetric Testing Testing early-stage colorimetric chemistry, to provide the basis for non-electronic or fieldable electronic detection capabilities. Colorimetric detection is useful for several of the productization pathways that the Company intends to pursue including AMIPs™ based ELISA tests, lateral flow tests, and the SmartMask™. Once perfected, color changes can be implemented such that positive detections can be seen visually and can also be manipulated to change bar codes or Quick Response codes ("QR") allowing for machine reading of results and ultimately integration with contact/virus outbreak tracing. Such automation will allow anyone to read their test results individually or as part of entry to schools, work recreational activities, etc. and maintain privacy while providing health experts with needed data on transmission and outbreak epicenters.
- 4. Development of Imprint Stamp A major advancement in the production of AMIPs will be development of the re-usable

imprint stamp. The stamp provides the capability for mass production of the AMIPs polymer without continued access and use of the target virus.

Test work at the UofA laboratories is progressing under the direction of Sixth Wave Senior Scientist Dr. Garrett Kraft, in cooperation with Dr. Michael J. Serpe (UofA Department of Chemistry) and Dr. Michael Joyce (UofA Department of Medical Microbiology). The relationship with UofA allows for access to the Virus and other pathogens, as well as access to a variety of advanced analytical equipment needed for this development.

As previously reported, SIXW has filed two patents regarding the AMIPs™ technology and its application to specific products that can utilize AMIPs™. The Company is not making any express or implied claims that its current AMIPs™ product has the ability to eliminate, cure, contain, or detect, at a commercial level, COVID-19 (or SARS-2 coronavirus) at this time.

For more information on the AMIPs™ and associated molecular imprinting technology, please visit: https://www.amips.com.

About Sixth Wave

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

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 web site at: www.sixthwave.com.

ON BEHALF OF THE BOARD OF DIRECTORS

"Jonathan Gluckman"
Jonathan Gluckman, Ph.D., President & CEO

For information, please contact the Company:

Phone: (801) 582-0559

E-mail: info@sixthwave.com

Cautionary Notes

This press release includes certain statements that may be deemed "forward-looking statements" including statements regarding the planned use of proceeds and performance of the AMIPs™ technologies. 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 of its patent application and has not yet applied for regulatory approval for the use of this product from any regulatory agency.