

February 27, 2020



Pressure BioSciences Launches New Era in Preparation of Water-Soluble Nanoemulsions, for CBD and Other Valuable Oils, with Opening of UST Demonstration Laboratory

NEW UST Video Release - Solving Complex Formulation & Processing Challenges By Creating High Quality CBD Oil Nanoemulsions Using Physics not Chemistry

SOUTH EASTON, Mass., Feb. 27, 2020 /PRNewswire/ -- Pressure BioSciences, Inc. (OTCQB: PBIO) ("PBI" or the "Company"), a leader in the development and sale of broadly enabling, pressure-based instruments, consumables, and platform technology solutions to the worldwide biotechnology, biotherapeutics, and other industries, today announced the official opening of its new Ultra Shear Technology™ ("UST™") Demonstration Laboratory (the "UST Demo Lab"). The UST Demo Lab is located in the Company's South Easton, Massachusetts facility.

A major purpose of the UST Demo Lab is to showcase the ability of the Company's revolutionary UST Platform to process CBD oil into true, high quality, water-soluble nanoemulsions. It is expected that nanoemulsions of CBD will be more stable, have superior aesthetic quality, and offer higher bioavailability than the standard macro/microemulsions used in most CBD products today (Nanoemulsions, in Handbook of Nanomaterials in Industrial Applications, Ghodake and Patravale, 2018). A second purpose is to invite potential purchasers of the Company's UST-based BaroShear Systems (initial release expected Q4 2020) to evaluate how their CBD and other product formulations work with the Company's revolutionary UST platform.

This Company today released a new short video demonstrating how CBD oil from an independent manufacturer was processed into a clear, water-soluble nanoemulsion using a UST-based, first generation BaroShear system. The video shows the CBD oil and water mixture prior to and after UST processing.

Link to new short video showcasing the UST Demonstration Lab: [PBI UST CBD Video 022720](#)

CBD and other cannabinoids are extracted from the hemp plant in an oil form. The water-based biology of human bodies has difficulty accessing and absorbing oily molecules from ingested or topically applied hemp oil drops. According to Jason Ellis, President of Vegas CBD Factory, "My colleagues in the cannabis market are beginning to realize that high

quality CBD products will only come by using high quality, water-soluble nanoemulsions of CBD oil, such as those generated from processing CBD Oil with PBI's UST™ platform, which I have observed first-hand in their lab."

Kenneth F. Micciche, Director of PBI's UST Program, said: "We processed samples of CBD oil formulations from several highly interested companies over the past two months, in an effort to optimize the service we announced today. The results speak for themselves: one group (Vegas CBD Factory) ordered six BaroShear K45 systems (for Q4 2020 delivery and installation). We believe several more companies who participated in the early evaluation process are close to giving us their purchase orders. The ability to showcase the UST platform in real life, and see the final product first-hand, has been shown to be vital to our marketing efforts. As has been said in the past: 'build it and they will come'. The opening of the UST Demo Lab is a critical accomplishment in our UST sales and marketing strategy."

Richard T. Schumacher, President and CEO of PBI commented: "The initial reactions from manufacturers of topical and ingestible cannabidiol products processed in our lab during the trial period have been extremely positive. They quickly saw how they could realize substantial cost reductions while eliminating the overloading of poorly water-soluble CBD and other cannabinoids into products to achieve targeted dosing levels. We believe our breakthrough technology platform provides them with a new-found ability to provide safe and effective dosing for their customers, which in turn should stimulate greater growth in the market for CBD-based products overall, and strong sales of our BaroShear product line when it is released to the market later this year."

About Pressure BioSciences, Inc.

Pressure BioSciences, Inc. (OTCQB: PBIO) is a leader in the development and sale of innovative, broadly enabling, pressure-based solutions for the worldwide life sciences and other industries. Our products are based on the unique properties of both constant (i.e., static) and alternating (i.e., pressure cycling technology, or PCT) hydrostatic pressure. PCT is a patented enabling technology platform that uses alternating cycles of hydrostatic pressure between ambient and ultra-high levels to safely and reproducibly control biomolecular interactions (e.g., cell lysis, biomolecule extraction). Our primary focus is in the development of PCT-based products for biomarker and target discovery, drug design and development, biotherapeutics characterization and quality control, soil & plant biology, forensics, and counter-bioterror applications. Additionally, major new market opportunities have emerged in the use of our pressure-based technologies in the following areas: (1) the use of our recently acquired, patented technology from BaroFold, Inc. (the "BaroFold" technology) to allow entry into the bio-pharma contract services sector, and (2) the use of our recently-patented, scalable, high-efficiency, pressure-based Ultra Shear Technology ("UST") platform to (i) create stable nanoemulsions of otherwise immiscible fluids (e.g., oils and water) and to (ii) prepare higher quality, homogenized, extended shelf-life or room temperature stable low-acid liquid foods that cannot be effectively preserved using existing non-thermal technologies.

Forward Looking Statements

This press release contains forward-looking statements. These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels

of activity, performance or achievements expressed, implied or inferred by these forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "could," "would," "expects," "plans," "intends," "anticipates," "believes," estimates," "predicts," "projects," "potential" or "continue" or the negative of such terms and other comparable terminology. These statements are only predictions based on our current expectations and projections about future events. You should not place undue reliance on these statements. In evaluating these statements, you should specifically consider various factors. Actual events or results may differ materially. These and other factors may cause our actual results to differ materially from any forward-looking statement. These risks, uncertainties, and other factors include, but are not limited to, the risks and uncertainties discussed under the heading "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, and other reports filed by the Company from time to time with the SEC. The Company undertakes no obligation to update any of the information included in this release, except as otherwise required by law.


For more information about PBI and this press release, please click on the following website link:

<http://www.pressurebiosciences.com>

Please visit us on Facebook, LinkedIn, and Twitter.

Press Contacts:

Richard T. Schumacher, President and CEO (508) 230-1828 (T)
Kenneth F. Micciche, Director – UST
Program (508) 230-1829 (F)

 View original content: <http://www.prnewswire.com/news-releases/pressure-biosciences-launches-new-era-in-preparation-of-water-soluble-nanoemulsions-for-cbd-and-other-valuable-oils-with-opening-of-ust-demonstration-laboratory-301012252.html>

SOURCE Pressure BioSciences, Inc.