Lexaria Bioscience Expands Pharmaceutical Division to Include Lipophilic Antiviral Active Molecules for COVID-19 Treatment

Kelowna, British Columbia – March 23, 2020 – Lexaria Bioscience Corp. (OTCQX: LXRP) (CSE: LXX) (the "Company" or "Lexaria"), a global innovator in drug delivery platforms, has expanded the scope and activities of its 100%-owned subsidiary *Lexaria Pharmaceutical Corp.*, to investigate how Lexaria's patented DehydraTECH™ drug delivery technology could enhance delivery and effectiveness of certain antiviral drugs in the fight against coronavirus disease COVID-19. Lexaria intends to expand collaboration with leading laboratories in North America and internationally as soon as possible.

Lexaria Pharmaceutical Business Unit

Within the *Lexaria Pharmaceutical Corp.* business unit resides Intellectual Property for enhanced delivery of drugs such as non-steroidal anti-inflammatories ("NSAIDs"), vitamins, hormone treatments utilizing estrogen or testosterone and phosphodiesterase ("PDE5") inhibitors; with expansion now underway to include antiviral drugs as well. Lexaria's patented DehydraTECH drug delivery technology enhances the way Active Pharmaceutical Ingredients ("APIs") enter the bloodstream, promoting lower overall dosing and higher effectiveness for lipophilic active molecules, including the lipophilic antiviral drugs under investigation. Lexaria operates a licensed in-house research laboratory and holds a robust intellectual property portfolio with 16 patents granted and over 60 patents pending worldwide.

Lipophilic Antiviral Drug Delivery – Rationale

Researchers around the world are currently investigating various antiviral drugs as potential candidates to treat persons infected with coronavirus. Many of these drugs are fat soluble and known to present significant bioavailability challenges in successfully reaching the human bloodstream when administered in oral form. Lexaria has established itself as a scientific leader in oral delivery of fat soluble drugs.

DehydraTECH has been proven to reduce time of onset and increase bioavailability in every fat soluble drug with which it has been tested to date. When quantified, the increase in bioavailability can significantly reduce the drug dose required to treat a condition, thereby reducing treatment costs. In the case of COVID-19 where many millions of drug doses may be required worldwide, this has the potential to save billions of dollars and improve accessibility to positively effect healthcare on a global scale. Furthermore, DehydraTECH's bioavailability enhancing effects are believed to be enabled in part by influencing a decrease in first pass liver metabolism for orally administered drugs. This, in turn, is thought to enable improved safety and tolerability for patients by maximizing the quantity of the ingested drug that traverses the GI tract and reaches the bloodstream without being degraded by or placing stress upon organs that process waste elimination.

Lexaria Pharmaceutical Corp. intends to investigate its leading-edge drug delivery technology throughout 2020 and 2021 to improve drug delivery efficiency for potential application for a number of virus-related diseases such as AIDS, Influenza and COVID-19.

Data-Driven R&D Program

Lexaria has completed the design phase and intends to conduct a pilot human pharmacokinetic ("PK") exploratory study in healthy volunteers with three or more antiviral drugs that have previously been studied against other coronavirus strains, comparing DehydraTECH formulations to controls. Lexaria intends to conduct this first study at a leading Canadian university where a study design and plan has already been submitted for ethics board approval. Lexaria will provide further details upon successful conclusion of the review process, as well as study outcomes when available.

If the PK data are successful in demonstrating antiviral drug delivery efficiencies, Lexaria will provide that data to researchers around the world to enable additional practical research in utilization of similar antiviral drugs in combating COVID-19. Additional publicly reported data may include expanded PK and pharmacodynamic screening in appropriate disease models in animals to predict human effectiveness.

Pending positive outcomes from its planned research activities, Lexaria will aggressively engage with prospective strategic partners to improve drug development where applicable, in alignment with its business model as a drug delivery technology licensor and provider.

Stock Option Cancellation

Separately, Lexaria also announces that on March 23, 2020 it has cancelled, with the approval of the optionees, an aggregate of 3,268,000 stock options (the "Options") having exercise prices ranging from US$0.37 to US$1.53. The Options were issued pursuant to the Company's registered stock option plans and, as a result of such option cancellations, the Company will be terminating its 2007 Stock Option Plan as there are no longer any options issued pursuant to that plan, though other options remain granted from Lexaria's other option plans.

About Lexaria

Lexaria Bioscience Corp. is a global innovator in drug delivery platforms. Its patented DehydraTECH™ drug delivery technology changes the way API's enter the bloodstream, promoting healthier ingestion methods, lower overall dosing and higher effectiveness for lipophilic active molecules. DehydraTECH increases bio-absorption; reduces time of onset; and can reduce drug costs for orally administered bioactive molecules including nicotine, vitamins, non-steroidal anti-inflammatory drugs (NSAIDs) and other molecules. Lexaria has licensed DehydraTECH to multiple companies for use in various oral application formats, including to a world-leading tobacco producer for the development of smokeless, oral-based nicotine products. Lexaria operates a licensed in-house research laboratory and holds a robust intellectual property portfolio with 16 patents granted and over 60 patents pending worldwide.
www.lexariabioscience.com

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FORWARD-LOOKING STATEMENTS

This release includes forward-looking statements. Statements which are not historical facts are forward-looking statements. The Company makes forward-looking public statements concerning its expected future financial position, results of operations, cash flows, financing plans, business strategy, products and services, competitive positions, growth opportunities, plans and objectives of management for future operations, including statements that include words such as "anticipate," "if," "believe," "plan," "estimate," "expect," "intend," "may," "could," "should," "will," and other similar expressions are forward-looking statements, including but not limited to: that any additional patent protection will be realized or that patent achievements will deliver material results. Such forward-looking statements are estimates reflecting the Company's best judgment based upon current information and involve a number of risks and uncertainties, and there can be no assurance that other factors will not affect the accuracy of such forward-looking statements. Factors which could cause actual results to differ materially from those estimated by the Company include, but are not limited to, government regulation and regulatory approvals, managing and maintaining growth, the effect of adverse publicity, litigation, competition, scientific discovery, the patent application and approval process and other factors which may be identified from time to time in the Company's public announcements and filings. There is no assurance that existing capital is sufficient for the Company's needs or that it will be able to raise additional capital. There is no assurance the Company will be capable of developing, marketing, licensing, or selling products containing cannabinoids, nicotine, anti-viral or any other active ingredient. There is no assurance that any planned corporate activity, scientific research or study, business venture, letter of intent, technology licensing pursuit, patent application or allowance, consumer study, or any initiative will be pursued, or if pursued, will be successful. There is no assurance that any of Lexaria's postulated uses, benefits, or advantages for the patented and patent-pending technology will in fact be realized in any manner or in any part. No statement herein has been evaluated by the Food and Drug Administration (FDA). Lexaria-produced products are not intended to diagnose, treat, cure or prevent any disease.

The CSE has not reviewed and does not accept responsibility for the adequacy or accuracy of this release.