

University of Northern Colorado Presenting PharmaCyte Biotech's Cannabis Research at the 2017 American Chemical Society National Meeting

LAGUNA HILLS, Calif., Nov. 14, 2016 (GLOBE NEWSWIRE) -- PharmaCyte Biotech, Inc. (OTCQB:PMCB), a clinical stage biotechnology company focused on developing targeted treatments for cancer and diabetes using its signature live-cell encapsulation technology, Cell-in-a-Box[®], today announced that its research partner, the University of Northern Colorado (UNC), has submitted abstracts for the presentation of two scientific papers at the 253rd American Chemical Society (ACS) National Meeting & Exposition in San Francisco, California, April 2-6, 2017.

The ACS National Meeting provides chemistry professionals a forum to meet, share ideas and advance scientific and technical knowledge. The theme of the upcoming meeting is "Advanced Materials, Technologies, Systems & Processes." PharmaCyte's *Cannabis* research at UNC fits the theme perfectly since it revolves around utilization of PharmaCyte's proprietary Cell-in-a-Box[®] technology. The papers will be presented by Dr. Richard M. Hyslop, Principal Investigator and Professor of Chemistry and Biochemistry at UNC and his students.

PharmaCyte's Chief Executive Officer, Kenneth L. Waggoner, commented "We are very pleased with the ongoing progress at UNC. The upcoming ACS meeting provides an ideal venue to present two more scientific papers that have been generated from the work being done by Dr. Hyslop and his team as well as showcase the versatility of Cell-in-a-Box[®] as an advanced therapeutic platform."

The first paper is titled "Development of a cannabinoid-based Cell-in-a-Box[®] therapeutic system targeted toward malignant tumors." This aspect of the UNC research investigates the feasibility of a patented cell-encapsulation technology in which cells producing enzymes capable of converting an inactive phytocannabinoid prodrug into an active anti-cancer drug are encapsulated in a cellulose-based porous polymer, which can be injected immediately upstream from a tumor. Then, an administered phytocannabinoid prodrug can be activated by the encapsulated cells at the site of the tumor. The paper describes how, using both specific phytocannabinoids and model compounds, a variety of cell lines have been screened for the appropriate enzymatic activity to convert an inactive cannabinoid prodrug into an active drug. Five cell lines have been observed to produce the desired enzyme and are being further assessed with specific phytocannabinoid prodrugs.

The second paper is titled "In vitro anti-neoplastic activity of specific phytocannabinoids of Cannabis sativa." As part of a more in-depth study to develop a cannabinoid-based targeted treatment of malignant tumors, the *in vitro* effects of select cannabinoids on several human

cancer cell lines have been investigated, including glioblastoma, pancreatic, breast, melanoma, lung and colon. The paper describes how single-cell layer cultures were treated with increasing levels of a purified cannabinoid and details the resultant changes in cancer cell populations. Initial results suggest that this cannabinoid possesses potent anti-proliferative effects against several types of cancer cells. Studies continue to assess this cannabinoid with several cancer cell lines, and it may represent a viable candidate for further therapeutic evaluation.

Dr. Hyslop has been involved in cancer research for four decades and is leading a team of scientists from UNC to develop a "green" approach to treating solid tumors, initially brain cancer. "We are looking forward to sharing some of our results with the scientific community," commented Dr. Hyslop. "Our team of biochemists, organic chemists, molecular biologists, genetic engineers, undergraduate students, and graduate students continue to work diligently to achieve our goal of developing targeted cannabinoid-based chemotherapy utilizing Cell-in-a-Box[®]."

For more information on the meeting visit: https://www.acs.org/content/acs/en/meetings/spring-2017.html.

About PharmaCyte Biotech

PharmaCyte Biotech a clinical stage biotechnology company developing therapies for cancer and diabetes based upon a proprietary cellulose-based live cell encapsulation technology known as "Cell-in-a-Box[®]." This technology will be used as a platform upon which therapies for several types of cancer and diabetes are being developed. PharmaCyte's therapy for cancer involves encapsulating genetically engineered human cells that convert an inactive chemotherapy drug into its active or "cancer-killing" form. These encapsulated cells are implanted as close to the patient's cancerous tumor as possible. Once implanted, a chemotherapy drug that is normally activated in the liver (ifosfamide) is given intravenously at one-third the normal dose. The ifosfamide is carried by the circulatory system to where the encapsulated cells have been implanted. When the ifosfamide comes in contact with the encapsulated cells they act as an artificial liver and activate the chemotherapy drug at the source of the cancer. This "targeted chemotherapy" has proven effective and safe to use in past clinical trials and results in no side effects.

In addition to developing a novel therapy for cancer, PharmaCyte is developing a treatment for Type 1 diabetes and insulin-dependent Type 2 diabetes. PharmaCyte plans to encapsulate a human cell line that has been genetically engineered to produce, store and release insulin in response to the levels of blood sugar in the human body. The encapsulation will be done using the Cell-in-a-Box[®] technology. Once the encapsulated cells are implanted in a diabetic patient they will function as a "bio-artificial pancreas" for purposes of insulin production.

Safe Harbor

This press release may contain forward-looking statements regarding PharmaCyte Biotech and its future events and results that involve inherent risks and uncertainties. The words "anticipate", "believe", "estimate", "expect", "intend", "plan" and similar expressions, as they relate to PharmaCyte or its management, are intended to identify forward-looking statements. Important factors, many of which are beyond the control of PharmaCyte, could cause actual results to differ materially from those set forth in the forward-looking

statements. They include PharmaCyte's ability to continue as a going concern, delays or unsuccessful results in preclinical and clinical trials, flaws or defects regarding its product candidates, changes in relevant legislation or regulatory requirements, uncertainty of protection of PharmaCyte's intellectual property and PharmaCyte's continued ability to raise capital. PharmaCyte does not assume any obligation to update any of these forward-looking statements.

More information about PharmaCyte Biotech can be found at<u>www.PharmaCyte.com</u>. It can also be obtained by contacting Investor Relations.

Investor Relations: PharmaCyte Biotech, Inc. Investor Relations Department Telephone: 917.595.2856

Email: Info@PharmaCyte.com

PHARMACYTE

BIOTECH

Source: PharmaCyte Biotech, Inc.