PRESS RELEASE

February 22, 2021

THIS NEWS RELEASE IS INTENDED FOR DISTRIBUTION IN CANADA ONLY AND IS NOT AUTHORIZED FOR DISTRIBUTION TO UNITED STATES NEWSWIRE SERVICES OR FOR DISSEMINATION IN THE UNITED STATES.

BRIGHT MINDS BIOSCIENCES INC. ANNOUNCES MARKETED PUBLIC OFFERING

Vancouver, BC – Bright Minds Biosciences Inc. (CSE:DRUG) ("Bright Minds" or the "Company") announces that it has commenced an underwritten marketed public offering (the "Offering") of units of the Company (the "Units"). Each Unit is comprised of one common share in the capital of the Company (a "Common Share") and one-half of one common share purchase warrant (each whole warrant, a "Warrant"). Each Warrant will entitle the holder thereof to purchase one Common Share.

Eight Capital is acting as lead underwriter and sole bookrunner on behalf of a syndicate of underwriters (the "Underwriters"). The number of Units to be sold, the offering price and the terms of the Units will be determined in the course of marketing and there can be no assurance as to completion of the Offering, or as to the actual size or terms of the Offering.

The Company has granted the Underwriters an option, exercisable in whole or in part, at the sole discretion of the Underwriters, at any time for a period of 30 days from and including the closing of the Offering, to purchase from the Company up to an additional 15% of the Units sold under the Offering, on the same terms and conditions of the Offering to cover over-allotments, if any, and for market stabilization purposes.

The Offering is being conducted pursuant to the Company's short form prospectus filed with the securities regulatory authorities in each of the provinces of Canada, except Quebec. The Offering is expected to close on March 9, 2021 and is subject to certain conditions including, but not limited to, the receipt of all necessary regulatory and stock exchange approvals, including the approval of the Canadian Securities Exchange ("CSE") and the applicable securities regulatory authorities.

The net proceeds of the Offering will be used by the Company for its research and development activities, as well as working capital and general corporate purposes.

The preliminary short form prospectus is available on SEDAR at www.sedar.com.

The securities being offered have not, nor will they be registered under the United States Securities Act of 1933, as amended, and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons in the absence of U.S. registration or an applicable exemption from the U.S. registration requirements. This press release shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the securities in the United States or in any other jurisdiction in which such offer, solicitation or sale would be unlawful.

About Bright Minds

Bright Minds is a pre-clinical biosciences company with a portfolio of compounds designed to precisely target abnormalities in neurocircuitry that lead to dysfunctional behaviors. Bright Minds is focused on developing targeted therapies with the potential to improve the treatment of mental health and neurological disorders through the use of serotonergic compounds leveraging its world class scientific and drug development expertise to bring forward the next generation of safe and efficacious neuropsychiatry drugs into the clinic. Bright Minds drugs extenuate the therapeutic aspects of psychedelic and other serotonergic compounds while minimizing the side effects thereby creating superior drugs to first generation compounds, such as psilocybin. Bright Minds was selected to participate in two National Institutes of Health ("NIH") Programs. These NIH collaborations are evaluating Bright Minds serotonin agonists for therapeutic potential in pain and in epilepsy.

This news release contains "forward-looking information" which may include, but is not limited to, statements with respect to expectations about the likelihood of completing the Offering, the anticipated size of the Offering, the anticipated offering price of the Units, the anticipated closing date, the use of the net proceeds of the Offering and the ability of the Company to secure required regulatory acceptances, including the approval of the CSE. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. A variety of factors, including known and unknown risks, many of which are beyond our control, could cause actual results to differ materially from the forward-looking information in this press release. Such factors include, without limitation, the risk of failure to satisfy customary closing conditions of the Offering. Additional risk factors can also be found in the Company's public filings under the Company's SEDAR profile at www.sedar.com. Forward-looking statements contained herein are made as of the date of this press release and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances, management's estimates or opinions should change, except as required by securities legislation. Accordingly, the reader is cautioned not to place undue reliance on forward-looking statements.

For further information:

Lisa M. Wilson lwilson@insitecony.com