Bright Minds Biosciences Establishes Scientific Advisory Board, Comprising Five Preeminent Physicians and Scientists Across Mental Health Specialties

-- Herbert Y. Meltzer, MD; Karl Deisseroth, MD, PhD; Robert C. Malenka, MD, PhD; Michael P. Bogenschutz, MD; and Peter Hendricks, PhD, bring decades of clinical and research expertise in psychiatry, addiction, behavioral health, and pharmacology to guide Company's development programs --

--Scientific Advisory Board members are affiliated with cutting-edge programs at elite academic and medical institutions --

-- Jan Torleif Pedersen, PhD, MSc, CNS drug specialist, to join Board of Directors --

VANCOUVER, British Columbia, May 02, 2022 -- Bright Minds Biosciences ("Bright Minds," "BMB" or the "Company") (Nasdaq: DRUG) (CSE: DRUG), a biotechnology company focused on developing novel drugs for the targeted treatment of neuropsychiatric disorders, epilepsy, and pain, today announced the formation of its Scientific Advisory Board ("SAB"). The Company named the following inaugural members:

- Herbert Y. Meltzer, MD, Northwestern University;
- Karl Deisseroth, MD, PhD, Stanford University;
- Robert C. Malenka, MD, PhD, Stanford University;
- Michael P. Bogenschutz, MD, NYU Langone Health; and
- Peter Hendricks, PhD, University of Alabama.

"These five accomplished scientists bring to Bright Minds their decades of pioneering investigative work across the spectrum of mental health diseases. Each has garnered widespread acclaim, having contributed significantly to the body of knowledge around brain functioning and psychiatric illnesses. Collectively, their scientific expertise in the field of neuropsychiatry will prove valuable to Bright Minds as we develop our pipeline of novel compounds. Their expertise will complement the clinical experience of our clinical team," stated Dr. Revati Shreeniwas, Chief Medical Officer of Bright Minds.

"We are thrilled and honored to welcome these distinguished scientists to our newly created Scientific Advisory Board. Each brings a unique perspective to this important work, and together with our talented ensemble of internal scientists, we believe we have a world-class team to carry out our drug development goals. The demand for new, safe and effective drugs to treat mental health disorders has never been greater. We look forward to the SAB's counsel as we execute on our mission to bring psychedelic drugs into mainstream psychiatry for the treatment of mental disorders and addiction," stated Ian McDonald, CEO and Co-founder of Bright Minds Biosciences.

"This is an especially exciting time for Bright Minds, as we continue to advance our lead program, BMB-101, toward an in-human clinical trial. Our SAB members, with their breadth of expertise, as well as their deep understanding of the many connections between the indications we are exploring, will no doubt help us to create customized solutions for a variety of medical diseases with high unmet need," concluded McDonald.

Herbert Y. Meltzer, MD, is Professor of Psychiatry and Behavioral Sciences, Pharmacology and Physiology and Director of the Translational Neuropharmacology Program at Northwestern University in Chicago, IL. His research interests include: the development of novel drugs for treatment and prevention of psychosis, depression, opioid abuse, and age-associated cognitive impairment; behavioral and neurochemical studies of antipsychotic, antidepressant, cognitive improving, and anti-suicide drugs; and genetic biomarkers. Dr. Meltzer received his BA from Cornell University, an MA in Chemistry from Harvard, and his MD from Yale University.

Karl Deisseroth, MD, PhD, is the D.H. Chen Professor of Bioengineering and of Psychiatry and Behavioral Sciences at Stanford University, and Investigator of the Howard Hughes Medical Institute. His laboratory created and developed optogenetics, hydrogel-tissue chemistry (beginning with CLARITY), and a broad range of enabling methods. He has employed his technologies to discover the neural cell types and connections that cause adaptive and maladaptive behaviors. His studies focus on neural physiology and behavior, both in natural behaviorally relevant neural circuit dynamics and in pathological dynamics underlying neuropsychiatric disease symptomatology and treatment. Dr. Deisseroth received an AB degree in Biochemical Sciences from Harvard and earned his MD and PhD from Stanford.

Robert C. Malenka, MD, PhD, is the Pritzker Professor of Psychiatry and Behavioral Sciences, Director of the Nancy Pritzker Laboratory and Deputy Director of the Wu Tsai Neurosciences Institute at Stanford University. His laboratory conducts research on the molecular mechanisms of neural communication, as well as the role of circuit dysfunction in brain disorders including addiction, Alzheimer's, autism, and depression. After graduating from Harvard College, Dr. Malenka received an MD and a PhD in Neuroscience from Stanford University School of Medicine.

Michael P. Bogenschutz, MD, an acknowledged leader in the field of psychedelic medicine, is Director, NYU Langone Center for Psychedelic Medicine and Professor, Department of Psychiatry at NYU Grossman School of Medicine. Dr. Bogenschutz's research interests include substance-related disorders, alcoholism, hallucinogens, emergency services, and alcohol-related disorders. He is actively engaged in numerous clinical trials and research studies, including one entitled, "Leveraging Biomarkers for Personalized Treatment of Alcohol Use Disorder Comorbid With PTSD." In 2021, he was named Director of the newly created NYU Langone Center for Psychedelic Medicine, which was created to support health-focused research across the translational spectrum, from basic science to phase III clinical trials, with three transdisciplinary areas of focus: psychiatry, medicine, and preclinical research. Dr. Bogenschutz received his MD from Harvard University.

Peter Hendricks, PhD, is a Professor of Public Health at the University of Alabama at Birmingham. Dr. Hendricks has more than 70 publications. His research interests cover alcohol and drug addiction, smoking cessation, and psychedelics as therapeutics for the treatment of psychiatric disorders, including anxiety, depression, and addiction. He has written extensively on classic psychedelics and microdosing. Dr. Hendricks received a BA in Psychology from the University of Virginia and a PhD in Clinical Psychology from the University of South Florida.

The Company also announced that Jan Torleif Pedersen, PhD, MSc, will join its Board of Directors and that Dr. Emer Lahey, PhD, MBA, will resign from her position on the Board of Directors, but will remain as a consultant to Bright Minds.

Jan Torleif Pedersen, PhD, MSc, is an innovative and highly experienced leader in drug discovery research, with more than 25 years of expertise in neuroscience research management. Dr. Pedersen's academic interests include neurodegeneration, bioinformatics, biophysics and drug discovery R&D. He is the founder of Torleif Science ApS, a consultancy company aimed at delivering innovation and new ideas in neuroscience. Prior to that, Dr. Pedersen spent 20 years at Lundbeck, a global pharmaceutical company specialized in brain diseases, in positions of increasing responsibility, including building its neurodegeneration/Alzheimer's disease pipeline, and bringing research programs to the clinic. Dr. Pedersen received an MSc in Chemistry from DTU – Technical University of Denmark, and a PhD in biophysics from the University of Bath.

About BMB-101

BMB-101, a 5-HT_{2C} selective and biased agonist, has demonstrated compelling activity in a host of *in-vitro* and *in-vivo* non-clinical tests. Compared to Locaserin, BMB-101 exhibits strong Gq signaling coupled with minimal Arrestin recruitment. Mechanistically, Serotonin (5- Hydroxytryptamine, 5-HT) is a monoamine neurotransmitter widely expressed in the central nervous system, and drugs modulating 5-HT have made a major impact in mental health disorders. Central 5-HT systems have long been associated with the control of ingestive behavior and the modulation of behavioral effects of psychostimulants, opioids, alcohol and nicotine. Over the past decade, the various 5-HT receptor subtypes have been cloned and characterized. Results of clinical trials and animal studies indicate that 5-HT_{2C} up receptor agonists may have therapeutic potential in the treatment of addiction by decreasing the intake of opioids as well as impulsive behavior that can escalate compulsive drug use.

About Dravet Syndrome

Dravet syndrome is an epilepsy syndrome that begins in infancy or early childhood and can include a spectrum of symptoms ranging from mild to severe. Children with Dravet initially show focal (confined to one area) or generalized (throughout the brain) convulsive seizures that start before 15 months of age (often before age one). These initial seizures are often prolonged and involve half of the body, with subsequent seizures that may switch to the other side of the body. These initial seizures are frequently provoked by exposure to increased temperatures or temperature changes, such as getting out of a bath. Other seizure types emerge after 12 months of age and can be quite varied. Status epilepticus – a state of continuous seizure requiring emergency medical care – may occur frequently in these children, particularly in the first five years of life. Dravet syndrome affects an estimated 1:15,700 individuals in the U.S., or 0.0064% of the population (Wu 2015). Approximately 80-90% of those, or 1:20,900 individuals, have both an SCN1A mutation and a clinical diagnosis of DS. This represents an estimated 0.17% of all epilepsies. As an area of high, unmet medical need, there currently exist only three FDA-approved medications for the treatment of DS: (1) Fintepla® (fenfluramine), which has a black-box label; (2) Diacomit® (stiripentol) and (3) Epidolex® (cannabidiol).

About Mental Disease

In the U.S., 1 in 4 adults experience some form of mental disease, including depression, anxiety, and post-traumatic stress disorder (PTSD), while 1 in 24 has a serious mental disease, and 1 in 12 has **substance use disorder**, with **comorbidities** being common. Depression is the single largest contributor to global disability and leads to 800,000 **suicide deaths per year**. Major depressive disorder impacts 300 million people worldwide, and 100 million of these are **resistant to current treatments**. Treatment resistant depression causes higher mortality than treatable depression and medical costs are **2 to 3 times greater**. One in 11 people will be diagnosed with **PTSD** during their lifetime. Drugs to treat mental diseases globally were worth $37 billion in 2020, and the market is projected to grow to $59 billion by **2031**. Serotonin (5-HT) is one of the most important neurotransmitters influencing mental health and is a target for **next-generation pharmacological treatments**.

About Bright Minds
Bright Minds is focused on developing novel transformative treatments for neuropsychiatric disorders, epilepsy, and pain. Bright Minds has a portfolio of next-generation serotonin agonists designed to target neurocircuit abnormalities that are responsible for difficult to treat disorders such as resistant epilepsy, treatment resistant depression, PTSD, and pain. The Company leverages its world-class scientific and drug development expertise to bring forward the next generation of safe and efficacious drugs. Bright Minds' drugs have been designed to potentially retain the powerful therapeutic aspects of psychedelic and other serotonergic compounds, while minimizing the side effects, thereby creating superior drugs to first-generation

compounds, such as psilocybin.

Investor Contacts:
Lisa Wilson
In-Site Communications, Inc.
489 Fifth Avenue, 29th Floor
New York, NY 10017
E: lwilson@insitecony.com

Josh Blacher
Bright Minds Biosciences, Inc.
19 Vestry Street
New York, NY 10013
E: josh@brightmindsbio.com