

FOR IMMEDIATE RELEASE:

Brightseed Introduces Rapid Profiling and Expanded Microbiome Discovery Programs for Partners

Brightseed To Present New Forager® AI Benchmarks and Research At IPA World Congress + Probiota America 2024, Company Accelerates Bioactive Pipeline and Product Development For Food. Beverage. and Consumer Health Companies

SAN FRANCISCO (May 21, 2024) – <u>Brightseed®</u>, the company that discovers bioactive compounds in nature with its proprietary AI platform, <u>Forager</u>, and develops novel ingredients for nutrition and health companies, today announced an expansion of their innovation programs for partners. Through the introduction of Rapid Profiling and the company's newly expanded Microbiome capabilities, Brightseed is unlocking novel health insights for product development and accelerating commercialization timelines for food, nutrition and bioscience companies. Brightseed will be presenting the company's latest AI benchmarks, capabilities and research at the <u>IPA World Congress + Probiota Americas 2024</u> conference in Salt Lake City on Wednesday, June 12.

Brightseed's expanded Microbiome discovery programs include the identification of microbially-derived bioactives and their associated health benefits when fermented ingredients or other prebiotic material interact with gut bacteria. Brightseed is collecting and analyzing fermented sources from around the globe with the help of global industry partners such as Korean food powerhouse, <u>CJ Foods</u>, to launch this effort.

"Our microbiome programs, which also include synbiotic product development, are tailored for companies who are deeply vested in bringing novel and clinically validated products into their food and consumer health portfolios," said David Brown, Vice President of Business Development at Brightseed. "The global market size for probiotics is valued at \$58 billion, and synbiotics provide more robust benefits to consumers than probiotics alone. Forager allows us to predict bioactives resulting from the interaction between bacterial strains and natural ingredients, which is an exciting application of AI in microbiome research and innovation."

In addition to their Microbiome offerings, Brightseed helps companies innovate for health by co-developing novel bioactive ingredients in specific health areas of interest, or by leveraging Forager AI, to investigate the full health potential of a company's existing hero ingredients. With the introduction of Rapid Profiling to their partner programs, Brightseed is now able to deliver actionable insights into phytochemical and bioactive composition of their ingredients or supply chain in just six to eight weeks, giving companies an accelerated roadmap for clinical validation and commercialization.

"Brightseed's innovation programs and our dedicated pipeline of bioactive ingredients are designed to empower the nutrition industry with differentiated and efficacious solutions that target key consumer health areas including gut health, metabolic health, and cognition," said Brown. "With Rapid Profiling and our expanded Microbiome capacity, we are delivering innovative health products at a fraction of the time and cost of traditional discovery and development approaches. This enables our partners to expand into new health areas and



diversify the ways in which they can investigate bioactives in their existing products, supply chains, side streams and waste streams."

Brightseed has developed the world's largest digitized library of natural compounds mapped to human health targets. To date, Forager has mapped over seven million compounds from plants, fungi, and bacterial strains across 23 human health areas, and has expanded the potential universe of bioactives by approximately eight times more than what is publicly known. Brightseed's expanded innovation programs leverage Forager's increasing coverage of bioactives and their associated health areas to predict bioactives resulting from the interaction between bacterial strains and natural ingredients.

The health-activating, small molecular compounds known as bioactives are found in plants, fungi and bacteria. A vast percentage of bioactives remain unexplored in the "dark matter" of nature due to the challenges associated with their discovery and isolation. In addition, there are multitudes of other bioactives that are only accessible through complex interactions between food and gut flora in a process known as biotransformation. Forager employs machine learning and metabolomic profiling to systematically illuminate the opaque, molecular inventory of the natural world and identify bioactive compounds mapped to scientifically-validated health benefits and biomarkers. As an added discovery method, Forager also employs generative AI models by learning patterns of validated training data from nature's chemistry.

In addition to partner programs, Forager's insights fuel Brightseed's pipeline of bioactive ingredients for the B2B marketplace with eight products in near-term development. In the past year, Brightseed has demonstrated its expanded partnerships and strong Forager capabilities through two new product launches. Forager's discovery of two bioactives found in hemp hulls led to the formulation of their first ingredient in the company's pipeline, Bio Gut Fiber, a novel, prebiotic dietary fiber for functional food and beverage. In a recent application of Bio Gut Fiber for consumers, Brightseed partnered with Manitoba Harvest, the global leader in hemp foods, to co-launch Organic Bioactive Fiber, a multi-benefit, bioactive-rich fiber solution available nationwide at Whole Foods Markets and on Amazon.

At the annual IPA World Congress + Probiota Americas conference in Salt Lake City, Brightseed will present "How AI is Decoding the Microbiome" in the *Tech Advances* session on Wednesday June 12, 12pm MDT. In addition, new research on Bio Gut Fiber's impact on the microbiome will be presented in a poster session at the 2024 <u>American Society of Microbiology (ASM) Microbe Conference</u> in Atlanta on June 14. The poster, titled "Novel plant-derived bioactive compounds shape the human gut microbiome in vitro," (HMB-FRIDAY-9700) will be presented by Dr. Steven Frese and Karla Flores Martinez from the University of Nevada, Reno's College of Agriculture, Biotechnology & Natural Resources.

To learn more about bioactives and Brightseed, visit www.brightseedbio.com.

¹ Upward of 5000 dietary bioactive compounds have been identified to date (Gonzalez-Gallego, V. Garcia- Mediavilla, S. Sanchez-Campos, and Tunon 2010; Liu 2013; Casas, Estruch, and Sacanella 2018), many of which now have a substantial body of evidence supporting their benefits on human health. https://www.tandfonline.com/doi/epdf/10.1080/10408398.2019.1632258?needAccess=true



About Brightseed

Brightseed®, the bioactives company, is a *World Economic Global Innovator* that illuminates nature to restore human health. Brightseed's proprietary AI, Forager®, accelerates bioactive discovery, biological validation, and ingredient formulation from years to months, rapidly revealing new connections between nature and humanity. Brightseed produces clinically proven bioactives for dietary supplements, food & beverage CPG, specialty nutrition and medical foods to power proactive health worldwide. Learn more at brightseedbio.com.

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