



Recursion Announces Completion of NVIDIA-Powered BioHive-2, the Largest Supercomputer in Pharmaceutical Industry

May 13, 2024

BioHive-2, an NVIDIA DGX SuperPOD with NVIDIA DGX H100 systems, ranked #35 in the TOP500 list of the most powerful supercomputers in the world across all industries as of May 2024.

SALT LAKE CITY, May 13, 2024 (GLOBE NEWSWIRE) -- [Recursion](#) (NASDAQ: RXXR), a leading clinical stage TechBio company decoding biology to industrialize drug discovery, today announced the completion of BioHive-2, Recursion's new [NVIDIA DGX SuperPOD](#) AI supercomputer, powered by 63 [DGX H100 systems](#) with a total of 504 [NVIDIA H100 Tensor Core GPUs](#) interconnected by NVIDIA [Quantum-2 InfiniBand networking](#). This NVIDIA-powered AI supercomputer results in four times faster speeds than Recursion's original supercomputer, BioHive-1, in benchmark performance tests. Based on available data, BioHive-2 is the fastest supercomputer wholly owned and operated by any pharmaceutical company worldwide.

"Scaled data generation paired with scaled computation is required to leverage AI in a space as vast and complex as biology," said Ben Mabey, Chief Technology Officer at Recursion. "Recursion has spent the last decade generating and aggregating one of the largest biological and chemical datasets in the world, purpose-built for training new AI models. With BioHive-2 now online, we have significantly more computational horsepower to accelerate our use of our ever-growing dataset, extending our ability to train larger and more generalizable foundation models and AI agents to industrialize our drug discovery efforts."

Recursion has demonstrated the importance of scaled computation by developing groundbreaking new foundation models like [Phenom-1](#), a deep-learning model designed to extract biologically meaningful features from images of cells. As Recursion increased the size of the training data and the number of model parameters, the model's performance increased, demonstrating a need for ample compute to train larger models. The experimentation and training to produce Phenom-1 required several months of computational time on BioHive-1. With BioHive-2, multiple ambitious AI projects of similar or greater size could be executed in parallel in shorter timeframes, enabling both the Recursion and Valence Labs teams to push on the frontier of AI in drug discovery and unlock the latent value of Recursion's data.

A smaller model similar to Phenom-1, called [Phenom-Beta](#), has been released for external use on the [NVIDIA BioNeMo platform](#). The Phenom series is just one of several different models Recursion has developed to accelerate the drug discovery process using biological, chemical, and real-world patient data. Phenom-Beta is the first third-party model to be made available on the BioNeMo platform.

"Accelerated computing, combined with the power of generative AI, is propelling the pharmaceutical industry into a new, advanced era of drug discovery," said Rory Kelleher, global head of business development for life sciences at NVIDIA. "BioHive-2, powered by NVIDIA DGX AI supercomputing, is poised to accelerate the development of additional industry-leading foundation models across biology, chemistry, and healthcare."

Other achievements that relied on Recursion's platform, powered by NVIDIA accelerated computing, include the massive protein-ligand interaction prediction dataset [announced last year](#). Recursion predicted the protein target(s) for approximately 36 billion chemical compounds in the Enamine REAL Space. As a result of this significant computational accomplishment, Recursion and Enamine have [formed a collaboration](#) to generate enriched compound libraries for the global drug discovery industry.

About Recursion

[Recursion](#) is a clinical stage TechBio company leading the space by decoding biology to industrialize drug discovery. Enabling its mission is the Recursion OS, a platform built across diverse technologies that continuously expands one of the world's largest proprietary biological, chemical and patient-centric datasets. Recursion leverages sophisticated machine-learning algorithms to distill from its dataset a collection of trillions of searchable relationships across biology and chemistry unconstrained by human bias. By commanding massive experimental scale — up to millions of wet lab experiments weekly — and massive computational scale — owning and operating one of the most powerful supercomputers in the world, Recursion is uniting technology, biology, chemistry and patient-centric data to advance the future of medicine.

Recursion is headquartered in Salt Lake City, where it is a founding member of [BioHive](#), the Utah life sciences industry collective. Recursion also has offices in Toronto, Montreal and the San Francisco Bay Area. Learn more at www.Recursion.com, or connect on [X](#) (formerly Twitter) and [LinkedIn](#).

Forward-Looking Statements

This document contains information that includes or is based upon "forward-looking statements" within the meaning of the Securities Litigation Reform Act of 1995, including, without limitation, those regarding expectations related to the performance of the BioHive-2 supercomputer and its impact on our operations and the drug discovery process; and all other statements that are not historical facts. Forward-looking statements may or may not include identifying words such as "plan," "will," "expect," "anticipate," "intend," "believe," "potential," "could," "continue," and similar terms. These statements are subject to known or unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements, including but not limited to: challenges inherent in pharmaceutical research and development, including the timing and results of preclinical and clinical programs, where the risk of failure is high and failure can occur at any stage prior to or after regulatory approval due to lack of sufficient efficacy, safety considerations, or other factors; our ability to leverage and enhance our drug discovery platform; our ability to obtain financing for development activities and other corporate purposes; the success of our collaboration activities; our ability to obtain regulatory approval of, and ultimately commercialize, drug candidates; our ability to obtain, maintain, and enforce intellectual property protections; cyberattacks or other disruptions to our technology systems; our ability to attract, motivate, and retain key employees and manage our growth; inflation and other macroeconomic issues; and other risks and uncertainties such as those described under the heading "Risk Factors" in our filings with the U.S. Securities and Exchange Commission, including our most recent Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the Fiscal Year Ended December 31, 2023. All forward-looking statements are based on management's current estimates, projections, and assumptions, and Recursion undertakes no obligation to correct or update any such statements, whether as a result of new information, future developments, or

otherwise, except to the extent required by applicable law.

Media Contact

Media@Recursion.com

Investor Contact

Investor@Recursion.com

Recursion Pharmaceuticals