

# Foremost Farms Selects Ginkgo Bioworks to Develop Technology for Upcycling Dairy Co-products

- Foremost aims to commercialize a technology that can convert dairy manufacturing co-products into environmentally friendly, value-added materials
- The partners aim to reduce the dairy industry's carbon footprint while simultaneously lowering manufacturing costs and creating a significant new revenue stream for the hundreds of Midwest dairy farmer members comprising the Foremost Farms cooperative
- Foremost Farms will leverage Ginkgo's bioproduction services to advance this novel technology with Ginkgo's market-leading metabolic engineering and analytical capabilities

**MIDDLETON, WI and BOSTON, MA — Nov. 9th, 2023** — Foremost Farms USA, a world-class producer of cheese, butter, and dairy ingredients supplied to national and international markets, and Ginkgo Bioworks (NYSE: DNA), which is building the leading platform for cell programming and biosecurity, today announced a partnership to use advances in biotechnology to enable domestic, sustainable biomanufacturing of materials from dairy co-products to benefit the environment, family farms and the dairy industry as a whole.

## Upcycling Dairy Co-products into Value-Added Materials

Through this partnership, Foremost Farms will leverage [Ginkgo's bioproduction services](#) to develop and commercialize a new technology that could help upcycle billions of pounds of dairy co-products each year. Foremost Farms has selected Ginkgo as its partner of choice to develop a new upcycling technology because of Ginkgo's leading metabolic engineering and analytical capabilities, which allow it to optimize strains for challenging environmental conditions while avoiding common toxicity issues.

## Reducing the Dairy Industry's Carbon Footprint

Today, the dairy industry produces low-value co-products that contribute to their overall carbon footprint. Ginkgo aims to help Foremost build a technology to reduce this carbon footprint by upcycling these low-value co-products. This process could provide an environmentally friendly alternative to wasteful and carbon-intensive chemical production through domestic, sustainable biomanufacturing solutions.

"We're excited to partner with Ginkgo Bioworks, which can uniquely help Foremost Farms realize its goals. Ginkgo's platform gives us access to everything we need to move from concept to commercialization faster, providing a competitive advantage," said Greg Schlafer, President and CEO, Foremost Farms. "We are innovating to continue our trajectory as environmental stewards that take care of our world and create value for dairy farm families by potentially lowering manufacturing costs and creating a significant new revenue stream for those farmers."

“Ginkgo is always on the lookout for opportunities to use biology to create more sustainable products, and we are especially interested in helping customers in legacy industries develop improved production processes and a more circular economy,” said Jennifer Wipf, Ginkgo’s Head of Commercial, Cell Engineering. “We’re eager to put our advanced metabolic engineering capabilities to work for Foremost Farms and are proud to help accelerate efforts focused on sustainable biomanufacturing.”

“We’re in a unique position to leverage Ginkgo’s expertise because their flexible R&D service offerings allow us to creatively approach this significant opportunity in our value chain,” said Declan Roche, Chief Commercial Officer at Foremost Farms. “With Ginkgo, we’re able to pursue this exciting opportunity while minimizing our internal R&D fixed costs and allowing our team to remain focused on our core business.”

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### **About Foremost Farms USA**

Foremost Farms USA® is a dairy cooperative with hundreds of Midwest dairy farmer members located across seven Midwest states, including Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio and Wisconsin – America’s Dairyland. It is one of the largest, leading dairy cooperatives in the United States and a major food manufacturing business. Every year, Foremost Farms produces millions of pounds of cheese, butter, whey and milk protein ingredients from the high-quality milk produced by its members. Its customers represent respected top brands and category leaders at national and regional levels in retail and foodservice channels, that are served with innovative solutions, technical services and customized products. For more information call 800-362-9196 or see [foremostfarms.com](https://foremostfarms.com).

### **About Ginkgo Bioworks**

Ginkgo Bioworks makes biology easier to engineer. Ginkgo doesn’t make products. Ginkgo enables innovators to develop and commercialize their products by providing end-to-end R&D services. Ginkgo’s platform services are built on flexible automation (its Foundry) and a massive repository of experimental data and biological assets (its Codebase), all powered by advanced software and AI tools. As the leading platform for cell programming, Ginkgo supports organizations across diverse markets, from food and agriculture to pharmaceuticals to industrial and specialty chemicals. Ginkgo’s biosecurity unit, Concentric by Ginkgo, is building next-generation biosecurity infrastructure and technologies that biodefense leaders need to prevent, detect, characterize, and respond to a wide variety of biological threats. For more information, visit [ginkgobioworks.com](https://ginkgobioworks.com) and [concentricbyginkgo.com](https://concentricbyginkgo.com), read our [blog](#), or follow us on social media channels such as X (formerly known as Twitter) ([@Ginkgo](#) and [@ConcentricByGBW](#)), Instagram ([@GinkgoBioworks](#) and [@ConcentricByGinkgo](#)), Threads ([@GinkgoBioworks](#)) or [LinkedIn](#).

### **Forward-Looking Statements of Ginkgo Bioworks**

This press release contains certain forward-looking statements within the meaning of the federal securities laws, including statements regarding the capabilities and potential success of the partnership and Ginkgo's cell engineering platform. These forward-looking statements generally are identified by the words "believe," "can," "project," "potential," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this press release, including but not limited to: (i) volatility in the price of Ginkgo's securities due to a variety of factors, including changes in the competitive and highly regulated industries in which Ginkgo operates and plans to operate, variations in performance across competitors, and changes in laws and regulations affecting Ginkgo's business, (ii) the ability to implement business plans, forecasts, and other expectations, and to identify and realize additional business opportunities, (iii) the risk of downturns in demand for products using synthetic biology, (iv) the uncertainty regarding the demand for passive monitoring programs and biosecurity services, (v) changes to the biosecurity industry, including due to advancements in technology, emerging competition and evolution in industry demands, standards and regulations, (vi) our ability to realize the expected benefits of merger and acquisition transactions, (vii) the outcome of any legal proceedings against Ginkgo, including as a result of recent acquisitions, (viii) our ability to realize the expected benefits from and the success of our Foundry platform programs, (ix) our ability to successfully develop engineered cells, bioprocesses, data packages or other deliverables, and (x) the product development or commercialization success of our customers. The foregoing list of factors is not exhaustive. You should carefully consider the foregoing factors and the other risks and uncertainties described in the "Risk Factors" section of Ginkgo's quarterly report on Form 10-Q filed with the U.S. Securities and Exchange Commission (the "SEC") on August 9, 2023 and other documents filed by Ginkgo from time to time with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and Ginkgo assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. Ginkgo does not give any assurance that it will achieve its expectations.

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