



Codex DNA Announces Synthetic Biology Collaboration with U.S. Department of Agriculture to Combat Citrus Greening Disease

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Codex DNA to contribute novel synthetic biology-based solutions to stop the spread of a global disease that continues to devastate the citrus industry

SAN DIEGO, Aug. 05, 2021 (GLOBE NEWSWIRE) -- Codex DNA, Inc. (NASDAQ: DNAY), a pioneer in automated benchtop synthetic biology systems, today announced a collaboration with researchers from the U.S. Department of Agriculture's (USDA) Agricultural Research Service (ARS), Cornell University, the University of Florida, the University of California at Riverside, and AgroSource, Inc., to identify scalable therapeutic measures against citrus greening disease. This multidisciplinary team has been awarded a grant worth nearly \$15 million from the National Institute of Food and Agriculture (NIFA) to develop cost-effective and sustainable solutions to the insect-borne disease ravaging the \$10 billion citrus industry in Florida, Texas, and California. As previously disclosed in Codex DNA's filings with the Securities and Exchange Commission, the company will receive up to \$3 million as a sub-awardee to leverage and expand its diverse synthetic biology portfolio for agricultural biotechnology applications.

Citrus greening disease, also called Huanglongbing, is a destructive bacterial disease affecting citrus plants around the globe. First identified in Florida in 2005, citrus greening disease has since been detected in every citrus-producing county in Florida and across California. Citrus greening disease is particularly destructive in its ability to reduce citrus taste and yield and significantly shortens the tree's lifespan. Citrus greening disease is easily spread by insects called psyllids. The USDA predicts that at the existing rate of spread and the continued impact on the economies of production, citrus greening disease could destroy the U.S. citrus industry.

The NIFA grant connects researchers across disciplines including molecular and cellular biology, synthetic biology, plant physiology, pest-transmitted disease interactions, agricultural engineering, and others.

"We are delighted to work with Codex DNA to solve the major global citrus greening disease challenge. As a leader in the synthetic biology field, Codex DNA brings a unique approach to this problem," said Robert Shatters, PhD, Research Leader of USDA ARS and Principal Investigator on the NIFA grant.

Codex DNA will use its automated benchtop system to rapidly generate synthetic DNA capable of delivering therapeutic molecules to plants. The company offers an ideal screening solution for the team's novel symbiont technology because it enables the generation of complex and diverse synthetic DNA libraries in a short amount of time.

"We are grateful to NIFA for this funding and to the rest of our collaborators for envisioning such a compelling project," said Todd R. Nelson, PhD, CEO of Codex DNA. "This project aligns perfectly with our company's goal of enabling the development of sustainable, synthetic biology-based solutions to address the biggest challenges we face today. We are looking forward to working with this team of scientists to help protect our citrus plants and secure our food supply."

Additionally, Codex DNA will build on its expertise in developing the VmaxTM system, a scalable therapeutic molecule discovery and production platform that enables rapid and cost-effective screening and identification of biomolecules that could be effective against citrus greening disease. Codex DNA plans to make the Vmax system broadly accessible for researchers interested in the identification of treatment candidates for other plant, animal, and human diseases.

About Codex DNA

Codex DNA is empowering scientists with the ability to address many of humanity's greatest challenges through synthetic biology. As inventors of the industry-standard Gibson Assembly[®] method and the first commercial automated benchtop DNA and mRNA synthesis system, Codex DNA is enabling rapid, accurate, and reproducible writing of DNA and mRNA for numerous downstream markets. The company's award-winning BioXpTM system consolidates, automates, and optimizes the entire synthesis, cloning, and amplification workflow. As a result, it delivers virtually error-free synthesis of DNA/RNA at scale within days and hours instead of weeks or months. Scientists around the world are using the technology in their own laboratories to accelerate the design-build-test paradigm to create novel, high-value products for precision medicine, biologics drug discovery, vaccine and therapeutic development, genome editing, and cell and gene therapy. Codex DNA is a public company based in San Diego. For more information, visit codexdna.com.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Such forward-looking statements are based on Codex DNA's beliefs and assumptions and on information currently available to it on the date of this press release. Forward-looking statements may involve known and unknown risks, uncertainties and other factors that may cause Codex DNA's actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. These statements include but are not limited to statements regarding Codex DNA's ability to generate synthetic DNA capable of delivering therapeutic molecules to plants. These and other risks are described more fully in Codex DNA's filings with the Securities and Exchange Commission ("SEC") and other documents that Codex DNA subsequently files with the SEC from time to time. Except to the extent required by law, Codex DNA undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

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