

FOR IMMEDIATE RELEASE

Ora Biomedical awarded NIH SBIR Phase I technology development grant to advance high-throughput longevity intervention discovery program

Technology development support for building innovative system to enhance rigor and reproducibility in longevity drug discovery

Tukwila, WA – September 2, 2024 – Ora Biomedical, Inc., a pioneering longevity biotechnology company, is pleased to announce that it has been awarded a Small Business Innovation Research (SBIR) Phase I grant from the National Institutes of Health (NIH). The \$324,240 grant will support the development of *EleGantry*, an innovative software and hardware infrastructure designed to enhance rigor and reproducibility in invertebrate research, with a particular focus on longevity studies using *Caenorhabditis elegans* (*C. elegans*).

EleGantry: Revolutionizing Preclinical Drug Discovery

Ora Biomedical specializes in discovering and developing interventions that extend healthy lifespan and combat age-associated diseases by targeting the fundamental mechanisms of biological aging. The EleGantry system represents a significant advancement in the company's high-throughput drug discovery pipeline. By automating key steps in the *C. elegans* research process and enhancing data collection across the entire lifespan, EleGantry will address the growing need for increased rigor and reproducibility in preclinical studies.

"With the NIH's support, we are poised to identify and overcome major sources of variability and challenges associated with *C. elegans* research, contributing to our goal of creating the World's largest and highest quality longevity interventions database," said Dr. Mitchell Lee, CEO of Ora Biomedical. "EleGantry will not only elevate the standard of preclinical aging research but also expedite development of robust therapeutics that can significantly extend healthy human lifespan."

Why EleGantry Matters

C. elegans has long been a mainstay in biomedical aging research because highly evolutionarily conserved features drive aging from invertebrates to mammals. However, variability in research methodologies has often led to inconsistent results, particularly in studies focused on lifespan. EleGantry will mitigate these issues by integrating advanced imaging, data collection, and analysis tools powered by state-of-the-art machine learning algorithms. The platform will also automate data reporting, making it easier for researchers to replicate studies and validate findings. Ora Biomedical's pioneering work in this field advances non-mammal animal models for drug development and aligns closely with the FDA Modernization Act 2.0 which aims to reduce the use of live mammals in research.



"The development of EleGantry is crucial as we move towards more reliable and scalable invertebrate models for drug discovery," added Dr. Lee. "This tool will enable us to identify and prioritize therapeutic leads with unprecedented efficiency and accuracy."

Looking Ahead

The successful completion of this Phase I project will pave the way for the subsequent development and commercialization of EleGantry, further establishing Ora Biomedical as a leader in longevity biotechnology. The company plans to use EleGantry to expand its preclinical screening capabilities, providing a robust platform for discovering the next generation of gerotherapeutics.

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About Ora Biomedical

Ora Biomedical, Inc. is a longevity biotechnology company headquartered in Tukwila, WA. Launched out of the University of Washington School of Medicine in 2022, Ora Biomedical develops interventions that maximize healthy lifespan by targeting the molecular mechanisms that drive aging itself. Ora uses best-in-class robotics and AI to perform high-throughput, high-precision phenotypic testing in live animals with lifespan, healthspan, and stress resistance as primary endpoints.

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