Varro’s Biosensors Included in $40M ARPA-H Team Proposal Led by Virginia Tech and Washington University in St. Louis

Varro to Receive up to $7.2M to Advance Real-Time Aerosolized Pathogen Detection Technology

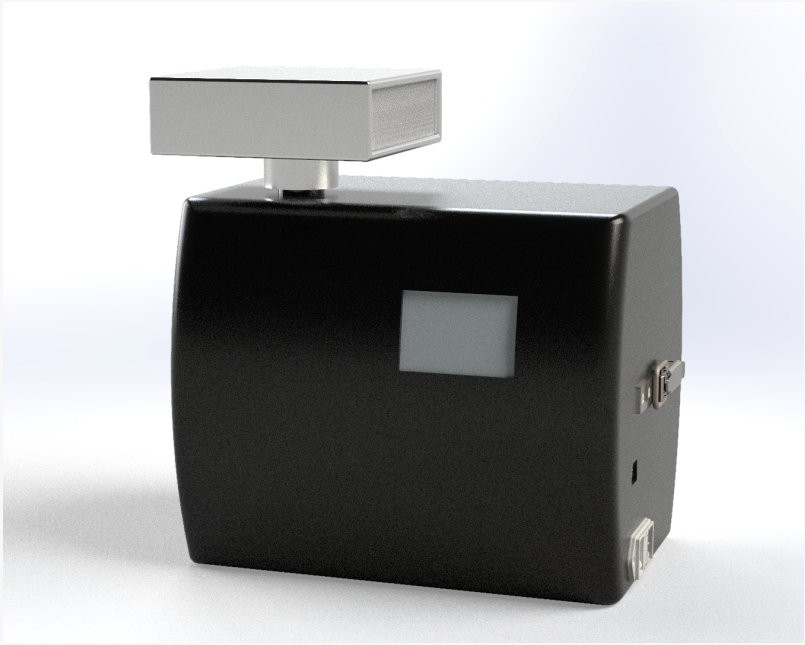

Varro Cofounder and CEO Tom Cirrito

ST. LOUIS, MO, UNITED STATES, October 20, 2025 /EINPresswire.com/ -- Varro Life Sciences, Inc., a biotechnology company developing devices that disrupt the transmission of infectious disease, announced today that development of its pathogen air biodetector technology has been funded by the Advanced Research Projects Agency for Health (ARPA-H). This initiative, spearheaded by Virginia Tech with the participation of Washington University in St. Louis (WashU) and other institutions, has been awarded an initial funding allocation of $20 million, with the potential for up to $40 million over five years. Varro’s portion of the project totals up to $7.2 million of the agreement.

“We are thrilled to collaborate with ARPA-H, Virginia Tech, WashU, and our other partners on this groundbreaking project,” said Tom Cirrito, Varro Co-Founder and CEO. “Our real-time biosensor technology is designed to revolutionize how we detect and respond to airborne pathogens, ultimately disrupting the transmission of infectious diseases in indoor environments where they most frequently spread.”

The funding is provided through ARPA-H’s Building Resilient Environments for Air and Total Health (BREATHE) program, which supports smart building systems that monitor and respond to changes in indoor air quality to enhance public health. It aims to reduce respiratory illnesses like

colds, flu, and asthma symptoms by 25 percent. Initial testing for the system will be conducted in daycare centers - environments with high rates of viral transmission. The team's researchers anticipate that implementation of the technology will lead to fewer illnesses among children, parents, and workers, resulting in improved health, reduced absenteeism, and increased productivity.



Varro Pathogen Air Biodetector

Varro's Pathogen Air Biodetector was developed through a collaborative effort with researchers at WashU. The technology has received significant support from key partners including Vitalik Buterin, co-founder of Ethereum; the National Institutes of Health (NIH); and FluLab, an organization dedicated to the prevention and treatment of influenza. Varro has secured exclusive license agreements to WashU intellectual property covering this technology.

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>
> *Tom Cirrito, Varro Co-Founder and CEO*

Varro plans to commercialize its pathogen air biodetectors, breath-based diagnostic devices, and micro-immunoelectrode biosensors (MIEs) capable of detecting pathogens in seconds across various settings. Initial target users for the technology include senior living centers, primary care clinics, medical facilities, offices, government and military facilities, and schools.

Varro officially opened its lab and headquarters in St. Louis on August 21, 2025, in a ceremony attended by Missouri Governor Mike Kehoe, St. Louis Mayor Cara Spencer, and other dignitaries. The company is founded on an open-source business model and is a leader in promoting open-source within the biotech and diagnostics sectors.

About Varro Life Sciences

Varro Life Sciences (Varro) is an innovative health-tech company developing products to detect airborne pathogens in real time in order to disrupt the transmission of infectious disease. Founded in 2020, the company's vision is to reduce the impact of future disease outbreaks. To learn more about Varro Life Sciences, visit varrobio.com.

About Washington University in St. Louis School of Medicine and McKelvey School of Engineering

Washington University School of Medicine's 1,700 faculty physicians also are the medical staff of Barnes-Jewish and St. Louis Children's hospitals. The School of Medicine is a leader in medical research, teaching and patient care, consistently ranking among the top medical schools in the nation by U.S. News & World Report. Through its affiliations with Barnes-Jewish and St. Louis Children's hospitals, the School of Medicine is linked to BJC HealthCare.

With 140 full-time faculty, 1,387 undergraduate students, 1,448 graduate students and 21,000 living alumni, the McKelvey School of Engineering at Washington University in St. Louis promotes independent inquiry and education with an emphasis on scientific excellence, innovation and collaboration without boundaries. McKelvey Engineering has top-ranked research and graduate programs across departments, particularly in biomedical engineering, environmental engineering and computing, and has one of the most selective undergraduate programs in the country.

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