



## Nautilus to Measure Proteoforms Driving Alzheimer's Disease and Cancer in ARPA-H-Funded SEEDS Consortium

Oct 27, 2026

**Nautilus expects to receive up to \$6 million to bring its Voyager™ Platform to a multidisciplinary team integrating protein science, AI, and computational modeling to develop new diagnostics and therapeutics**

SEATTLE, Oct. 27, 2026 (GLOBE NEWSWIRE) -- Nautilus Biotechnology, Inc. (NASDAQ: NAUT), a company pioneering intact, single-molecule proteomics approaches, today announced its participation in SEEDS (Sequence-to-disease: Environment-aware Ensembles of Disordered proteins at Scale), a four-year, multi-center research consortium awarded up to \$51.7 million by the Advanced Research Projects Agency for Health (ARPA-H). The consortium, which is co-led by the [Buck Institute for Research on Aging](#) and [Georgetown University](#), aims to predict how disease-causing proteins misfold before irreversible damage occurs, and to use those predictions to develop new ways of detecting, slowing, and treating neurodegenerative diseases and cancer. Nautilus expects to receive up to \$6 million over the duration of the program to deploy its Voyager Platform to measure proteoforms – the distinct versions of proteins that drive function – from model systems, disease tissues, and biofluids, starting with Alzheimer's disease and Ewing sarcoma.

"The field knows more today about the downstream effects of protein misfolding than the upstream molecular causes. Nautilus' Iterative Mapping method is expected to provide an important tool to help us quantify the diverse proteoforms that may drive misfolding in the first place. Within SEEDS, we will apply the method to diseases where early intervention is critical," said Priyanka Joshi, Ph.D., Assistant Professor in the Department of Biochemistry and Molecular & Cellular Biology at Georgetown University School of Medicine and SEEDS co-lead.

The genesis of pathologies such as Alzheimer's disease and cancer often lies in protein dysregulation, misfolding, and aggregation. SEEDS seeks to understand and predict the behavior of intrinsically disordered proteins implicated in these diseases. As many as half of human proteins may have intrinsically disordered regions whose shapes are constantly shifting. Because they lack the stable shapes and binding pockets that most drugs are designed to fit, they have been hard to study and have long been considered "undruggable." Some of these protein shapes are prone to aggregation, leading to irreversible damage. Today, most treatments arrive only after that point, making earlier detection and intervention essential. SEEDS aims to address this challenge by developing diagnostics and therapeutics that enable earlier intervention. SEEDS is part of ARPA-H's [BIOmolecular Grammar for protein Aggregation Modulation and Intervention](#) (BIOGAMI) program, which focuses on the earliest stages of protein dysfunction, and is led by ARPA-H Program Manager Shannon Greene, Ph.D.

"Understanding how protein folding changes patterns that drive disease has been critical in our field," said Chuankai (Kai) Zhou, Ph.D., Principal Investigator at the Buck Institute for Research on Aging and SEEDS co-lead. "The Nautilus Voyager™ Platform is expected to give us a way to quantify how proteoforms contribute to distinct conformational states at high resolution, enabling us to determine how we might preempt disease progression before irreversible damage occurs."

Within SEEDS, the Nautilus work under the program will support the study of proteoforms of tau and EWS::FLI1, proteins implicated in Alzheimer's disease and Ewing sarcoma, respectively, and is anticipated to extend to a larger set of intrinsically disordered proteins. The Voyager Platform is designed to analyze millions to billions of intact proteins independently and simultaneously at massive scale to quantify the complex dynamics of the proteoform landscape across disease processes. The large data corpus generated from these studies is expected to be used to train AI models to predict how proteoforms push a protein toward aggregation. SEEDS researchers may be able to use those predictions to design new diagnostics and therapeutics.

Nautilus' participation in SEEDS builds on work already underway:

- A Voyager Platform field-evaluation unit at the Buck Institute for Research on Aging generating tau proteoform data since early 2025.
- Initiation of the Iterative Mapping Early Access Program earlier this year to enable broader access to Iterative Mapping of proteoforms ahead of the planned Voyager Platform shipment in mid-2027.
- Recent validation of the proprietary Iterative Mapping method in a peer-reviewed *Nature Methods* [publication](#).
- A collaboration with the Michael J. Fox Foundation and Weill Cornell Medicine-Qatar, supported by a foundation research grant, to develop a proteoform assay for alpha-synuclein, the protein implicated in Parkinson's disease.

SEEDS is the first application of Iterative Mapping to a pediatric cancer, Ewing sarcoma, and Nautilus plans to add proteoform assays on a continuing basis, with approximately 20 expected by mid-2028.

"We are excited to bring Iterative Mapping of proteoforms to this ARPA-H-supported effort to help define the critical link between proteoforms, protein misfolding, and disease," said Parag Mallick, Ph.D., Co-founder and Chief Scientist at Nautilus. "We believe that the highly differentiated data from the Nautilus Voyager Platform could unlock a new generation of proteoform-enabled diagnostics and therapeutics."

SEEDS is funded, in part, by the Advanced Research Projects Agency for Health (ARPA-H). The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the official policies, either expressed or implied, of the U.S. Government.

### About the Nautilus Voyager™ Platform

The Voyager Platform employs Nautilus' proprietary Iterative Mapping approach, which is designed to enable rapid measurement of intact, single-molecule proteins and proteoforms in a single, sample-to-answer workflow any lab can run. The platform's flow cells are designed to accommodate up to 10 billion intact protein molecules, enabling measurement across an exceptionally wide dynamic range. Iterative Mapping independently probes

single protein molecules across tens to hundreds of cycles, recording unique binding patterns for each individual molecule. Machine learning algorithms then convert the resulting probe-binding patterns into confident protein and proteoform quantifications, producing the structured, reproducible data required to train models on functional biology. Once analysis is complete, single-molecule counts are made available for download and further visualization. The Voyager instrument is designed for operational simplicity and standard lab benchtop placement, with a guided touchscreen user interface and minimal facility requirements, without need for bespoke gas or fluidic connections.

#### **About Nautilus Biotechnology, Inc.**

With its corporate headquarters in Seattle, Washington and its research and development headquarters in San Carlos, California, Nautilus is a development stage life sciences company advancing Voyager, a platform technology for quantifying and unlocking the complexity of the proteome. Nautilus' mission is to transform the field of proteomics by democratizing access to the proteome and enabling fundamental advancements across human health and medicine. To learn more about Nautilus, visit [www.nautilus.bio](http://www.nautilus.bio).

#### **Special Note Regarding Forward-Looking Statements**

This press release contains forward-looking statements within the meaning of federal securities laws. Forward-looking statements in this press release include, but are not limited to, statements regarding Nautilus' expectations with respect to the amount and timing of any funding that Nautilus may receive, the anticipated scope, activities and outcomes of the SEEDS research program, the planned timing of the Voyager Platform shipment, the expected number and timing of additional proteoform assays, the potential of its platform technology, its future products, their functionality and performance or their applicability in biological research and in potentially enabling new diagnostics and therapies. These statements are based on numerous assumptions concerning the development of Nautilus' products, target markets, and other current and emerging proteomics technologies, and involve substantial risks, uncertainties and other factors that may cause actual results to be materially different from the information expressed or implied by these forward-looking statements. Risks and uncertainties that could materially affect the accuracy of Nautilus' assumptions and its ability to achieve the forward-looking statements set forth in this press release include (without limitation) the following: Nautilus' product platform is not yet commercially available and remains subject to scientific and technical development, which is inherently challenging and difficult to predict; we may experience material delays as a result of unanticipated events; we cannot provide any guarantee or assurance with respect to the outcome of our development, collaboration, and commercialization initiatives or with respect to their associated timelines. For a more detailed description of additional risks and uncertainties facing Nautilus and its development efforts, investors should refer to the information under the caption "Risk Factors" in our Annual Report on Form 10-K as well as in our Quarterly Report on Form 10-Q to be filed for the quarter ended September 30, 2026 and our other filings with the SEC. The forward-looking statements in this press release are as of the date of this press release. Except as otherwise required by applicable law, Nautilus disclaims any duty to update any forward-looking statements. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this press release.

#### **Disclosure Information**

Nautilus uses filings with the Securities and Exchange Commission, its website ([www.nautilus.bio](http://www.nautilus.bio)), press releases, public conference calls, public webcasts, and its social media accounts as means of disclosing material non-public information and for complying with Regulation FD. Therefore, Nautilus encourages investors, the media, and others interested in Nautilus to review the information it makes public in these locations, as such information could be deemed to be material information.

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