Nautilus Biotechnology and Weill Cornell Medicine-Qatar Collaborate with The Michael J. Fox Foundation to Advance Single-Molecule Proteomics Research in Parkinson's Disease

Jan 28, 2026

• Support from The Michael J. Fox Foundation for Parkinson's Research to advance critical research into Parkinson's disease biology
• Nautilus' development of a single-molecule assay for measuring alpha-synuclein proteoforms is its latest application of Iterative Mapping method to uncover new biological insights
• Weill Cornell Medicine-Qatar's deep chemical biology and neurology expertise and field-leading protein standards and affinity reagents position the organizations to probe disease-associated proteoforms at unprecedented resolution

SEATTLE and DOHA, Qatar, Jan. 28, 2026 (GLOBE NEWSWIRE) -- Nautilus Biotechnology, Inc. (NASDAQ: NAUT), a company pioneering single-molecule proteome analysis; Weill Cornell Medicine-Qatar (WCM-Q); and The Michael J. Fox Foundation for Parkinson's Research (MJFF) today announced a research collaboration to study the connection between the alpha-synuclein (aSyn) protein and Parkinson's disease (PD). Supported by a $1.6 million research grant from MJFF, the high-impact project combines the Lashuel lab's expertise in the molecular and chemical biology of neurodegeneration with Nautilus' next-generation platform for measuring proteins and their functional variants, called proteoforms, at single-molecule resolution.

Understanding the many forms and modifications of alpha-synuclein is a key priority for MJFF, as these differences may improve our understanding of PD biology and variability across individuals. Through its discovery and biomarker research efforts, the Foundation supports innovative technologies to better characterize alpha-synuclein proteoforms and related pathways, with the aim of generating insights that can inform future clinical research. This work advances tools that strengthen biomarker development and, over time, help guide the design and outcomes of clinical trials.

Studies suggest that the protein aSyn may be a critical driver of PD pathogenesis and that post-translational modifications (PTMs) of the protein, including truncation and phosphorylation, could serve as possible drivers of pathogenesis and biomarkers for diagnosis. However, current proteomics approaches are limited in their ability to measure specific proteoforms of aSyn and how those proteoforms impact disease progression. To address this gap, collaborators at Nautilus, WCM-Q, and MJFF aim to develop a single-molecule assay to measure a large panel of aSyn proteoforms, thereby enabling new approaches to early detection, disease stratification, and disease monitoring for PD and related synucleinopathies.

Nautilus is pioneering a novel single-molecule platform and groundbreaking Iterative Mapping method with the potential to scale to disease targets including aSyn and tau proteins, the latter of which is initially validated and its real-world capabilities described in the company's recent preprint.

"We are proud to receive a research grant from The Michael J. Fox Foundation for Parkinson's Research and partner with the collaborative teams at MJFF and the Lashuel lab at Weill Cornell Medicine-Qatar to shed light on the underlying role of alpha-synuclein in Parkinson's disease and to support efforts to advance biomarker research in Parkinson's disease," said Parag Mallick, Ph.D., co-founder and Chief Scientist of Nautilus. "This collaboration is further indication of the next-generation sensitivity, dynamic range, reproducibility, and versatility that our proteomics technology brings to neurodegenerative research and beyond."

The lab of Hilal A. Lashuel, Ph.D., Professor of Neuroscience at WCM-Q is an internationally recognized leader in the research of aSyn and its role in PD, having studied its PTMs for decades, developed novel chemical-biology tools to develop proteoform standards, and developed a set of antibodies that target specific PTMs. The technologies created respectively by WCM-Q and Nautilus are expected to form the foundation of the aSyn proteoform assay.

"Deciphering alpha-synuclein proteoforms at the single-molecule level holds tremendous promise for advancing Parkinson's disease diagnostics and therapies," said Dr. Lashuel, who has published extensively on the importance of diverse forms of aSyn. "We are looking forward to working jointly with Nautilus and MJFF to realize this potential by developing innovative assays and technologies that will enable precise mapping of the post-translational modification signatures of alpha-synuclein in health and neurodegenerative disease."

"At The Michael J. Fox Foundation, we support research that advances understanding of the biological mechanisms underlying Parkinson's disease," said Shalini Padmanabhan, PhD, Senior Vice President of Discovery and Translational Research at MJFF. "By investing in innovative approaches to study proteins such as alpha-synuclein, we aim to strengthen the foundation for future biomarker and therapeutic research through collaborations across academia and industry."

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 working to create 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.

About Weill Cornell Medicine-Qatar
Weill Cornell Medicine-Qatar is a partnership between Cornell University and Qatar Foundation. It offers a comprehensive Six-Year Medical Program leading to the Cornell University M.D. degree with teaching by Cornell and Weill Cornell faculty and by physicians at Hamad Medical Corporation (HMC), Sidra Medicine, the Primary Health Care Corporation, and Aspetar Orthopedic and Sports Medicine Hospital, who hold Weill Cornell appointments. Through its biomedical research program, WCM-Q is building a sustainable research community in Qatar while advancing basic science and clinical research. Through its medical college, WCM-Q seeks to provide the finest education possible for medical students, to improve health care both now and for future generations, and to provide high quality health care to the Qatari population.

Many Weill Cornell Medicine physicians and scientists maintain relationships and collaborate with external organizations to foster scientific innovation and provide expert guidance. The institution makes these disclosures public to ensure transparency. For this information, see the profile for Dr. Lashuel; https://vivo.weill.cornell.edu/display/cwid-hil4001.

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 regarding the company's expectations with respect to 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 filed for the quarter ended September 30, 2025 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.

Nautilus Media Contact
press@nautilus.bio

Nautilus Investor Contact
investorrelations@nautilus.bio

Weill Cornell Medicine-Qatar Media Contact
hyl2004@qatar-med.cornell.edu