Leading Cambridge companies collaborate on new anti-aging approach

Cambridge, UK, February 2025– Proteotype Diagnostics Ltd and Five Alarm Bio Ltd have been awarded a highly-competitive collaborative grant from the Babraham Research Campus from the Campus Innovation Award programme, to develop and test novel biomarkers for cellular senescence. This collaborative research effort will further validate Proteotype's Protein Cross Sections (PCS) as a diagnostic tool for senescence, and will help to provide confirmation that the Five Alarm Bio's compounds modulate a key hub in the cell's ability to defend itself against damage, and will be valuable for treating the diseases of older people where cell senescence plays a causal role.

A Collaborative Approach to Reversing the Effects of Aging

Proteotype has developed an innovative assay platform that provides a cross-sectional snapshot revealing how all the relative proportion of proteins present within a solution change in response to phenotypic changes. To date, the Company has focused on the application of this technology to cancer screening and detection from blood samples. Five Alarm Bio is developing small molecules that modulate the cell's ability to defend against the chemical damage related to aging, and has shown that it's compounds are effective at slowing the development of cell senescence, a key driver of age-related disease. By providing a new insight into the protein changes in senescence, the Proteotype PCS platform has the potential to accelerate the development of the Five Alarm Bio's compounds when compared to other available marker assays.

Dr. Emma Yates, co-founder and Chief Scientific Officer at Proteotype Diagnostics, said: *"We have a novel, rapid approach to characterizing all the proteins in a sample, but this has not yet been applied to cells. Five Alarm Bio is developing drugs to treat senescence. Our collaboration will allow us to determine the utility of Proteotype's technology in cell senescence and aging research. We appreciate that our colleagues at the Babraham recognize and are willing to fund this first collaborative effort."*

Cell Senesence and Aging

Cellular senescence is a state where cells stop dividing and become inactive. While this process can protect against cancer, the accumulation of senescent cells over time contributes to aging and age-related diseases. Research suggests that targeting senescent cells, a process known as "senotherapy", may offer a potential strategy for slowing down aging and improving health span. There is a multi-billion dollar global market for anti-aging therapies, including senotherapeutic drugs, and the industry has given rise to multiple firms, including the Alphabet-founded Calico Labs, LLC.

Janette Thomas, CEO of Five Alarm Bio, commented: "*Our cell biology expertise and Proteotype's protein chemistry is a powerful combination to characterise our cells faster and more cost effectively than with conventional methods. For Five Alarm Bio this will provide a fast quick, simple marker for future work on reducing or deferring to measure the reduction or*

deferral of cell senescence. We hope that this will be the first of many collaborative efforts with Proteotype Diagnostics."

Jenny Hirst, Senior Lead Science and Entrepreneurship at the Babraham Research Campus, said *"We are really delighted to see the Campus grant supporting an innovative collaboration between two of our LiveLabs members. The UKRI-BBSRC Campus Innovation Award gives companies on Campus access to a unique tranche of funding not available elsewhere. I wish Proteotype and Five Alarm Bio every success for the collaboration and look forward to updates"*

About Proteotype Diagnostics Ltd

Proteotype is a pioneering diagnostics company dedicated to the development of advanced multi-cancer early detection and personalised medicine tests that measure the host response to tumour development. By leveraging cutting-edge technologies and comprehensive research, Proteotype aims to revolutionise cancer diagnostics and improve early detection, ultimately enhancing patient outcomes and survival rates.
Media contact: pr@proteotype.com
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About Five Alarm Bio Ltd.

Five Alarm Bio is a drug discovery company deploying new understanding of the chemical damage associated with aging to discover treatments for serious illness. The Company's novel approach leverages well-known, inherently safe biology with broad potential therapeutic application. Small molecules in the pipeline promise to be potential treatments for a range of diseases and disabilities afflicting older people. For more information, please visit www.fivealarmbio.com
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About Babraham Research Campus

Babraham Research Campus Ltd is responsible for the management and commercial development of the Babraham Research Campus. Babraham Research Campus is distinct in its co-location of 60 bioscience companies with the Babraham Institute, a world-renowned research organization which receives strategic funding from the Biotechnology and Biological Sciences Research Council (BBSRC). The aim of the Campus is to support UK bioscience through academic research, but also with facilities and capabilities for early-stage and growing commercial organizations. The Campus provides companies laboratory and office space, networking and collaboration opportunities, together with access to outstanding scientific facilities in an ideal geographical location at the core of the Cambridge cluster.

For more information please visit: www.babraham.com and follow the Campus on LinkedIn here.

About the Campus Innovation Awards

The Campus Innovation awards are open to companies on Babraham Research Campus to apply for, and provide up to £30k to establish collaborations and accelerate impact. Funded by UKRI-BBSRC, the awards cover a broad range of activities such as proof-of-concept, access to equipment/ technology, and technology evaluation.