

## FluGen and UK's Arecor Receive Funding Award

FluGen-Arecor Partnership Enhances Promise of Universal Flu Vaccine Through Funding Award from the UK's innovation agency, the Technology Strategy Board

Cambridge, UK – Arecor Ltd of Cambridge, England received the "green light" and funding to pursue a research project applying Arecor's innovative Arestat<sup>TM</sup> formulation technology to a promising flu vaccine, REDEE FLU<sup>TM</sup>, developed by FluGen, Inc., of Madison, WI. The UK's innovation agency, the Technology Strategy Board, has awarded Arecor a Proof of Concept award through its Smart programme, to engage in research and development in the strategically important area of developing a stable formulation for REDEE FLU<sup>TM</sup>.

Arecor's CEO, Thomas Reese Saylor, explains "Arecor has demonstrated its strength in enabling advanced formulations of live and subunit vaccines through the application of our innovative technology platform, enabling market differentiation for major vaccine companies in addition to collaborations with PATH on development of thermostable vaccines for the developing world. FluGen's technology represents a major innovation toward the development of a universal flu vaccine and Arecor welcomes the opportunity to work with FluGen in applying its technologies to REDEE FLU<sup>TM</sup>, enabling a step change in storage and distribution, and ease of administration via intranasal delivery."

Arecor has a variety of innovative formulation platform tools, collectively referred to as Arestat<sup>TM</sup> technology. The breadth of application of these technologies is growing rapidly as Arecor continues to push the boundaries of what is possible to enable liquid-stable biologics.

FluGen's CEO, Paul Radspinner, explains, "Projects with outstanding companies like Arecor are a critical part of our strategic plan. We're in a race to save lives by making an effective flu vaccine that works for everyone and to prevent flu pandemics of the future. This is yet another step toward creating an influenza vaccine that really works. There is a desperate need for an effective vaccine particularly in the most vulnerable population that includes our mothers, fathers and grandparents." Recently the US Centers for Disease Control (CDC) showed that influenza vaccine rates were as low as 9% in people 65 and older.

FluGen's universal influenza vaccine candidate, REDEE FLU<sup>TM</sup>, is like no other vaccine technology in the world. REDEE FLU<sup>TM</sup> tricks the body into believing it is infected but doesn't bring on the symptoms of the disease. "It's as if the body's immune system is being placed on full alert without the risk of actually getting sick," Radspinner said.

A critical component to the success of REDEE FLU<sup>TM</sup> is how it is formulated for storage and shipment. This is where the innovative UK formulation experts Arecor join the team.

FluGen scientists, including Chief Scientific Officer Dr. Pamuk Bilsel and company co-founder Dr. Yoshihiro

Kawaoka, recently elected to the US National Academy of Sciences, are recognized as leaders in virology research and recognize the need for strong formulation expertise. "Arecor brings deep expertise in vaccine stabilization, storage and distribution," Dr. Bilsel states. "We consider their assistance invaluable to our goal of providing the most effective influenza vaccine. To us, efficacy means a long REDEE FLU<sup>TM</sup> shelf life and stability under temporary high temperatures so that health care organizations and governments have plenty of inventory to prevent dangerous flu outbreaks."

The Arecor/FluGen international collaboration will begin in July and continue into 2014. Both companies will work quickly to produce promising results by the time FluGen enters its Phase I human clinical trials next summer.

For more information on the FluGen/Arecor partnership and the government-backed Technology Strategy Board, use the following links:

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**Technology Strategy Board** 

## **About Arecor**

Arecor is a pioneer in the stabilization of biologic molecules, a key challenge in the development of many therapeutic proteins, peptides, vaccines and diagnostics. Many proteins, peptides and vaccines are too unstable in liquid form to develop ready-to-use drugs or are unstable at high concentrations and/or temperatures. Arecor has developed a set of unique technologies to address these problems with the potential to revolutionise the development, use and distribution of the next generation of vaccines and proteins.

## About FluGen

FluGen is innovating in influenza vaccination with its single-replication vaccine, REDEE FLU<sup>TM</sup>. Initial, independent test results indicate that REDEE FLU<sup>TM</sup> holds promise in becoming a "universal" flu vaccine, as it performed well against multiple strains, including the dangerous H1N1 and H5N1.

The **Technology Strategy Board** is the UK's innovation agency. Its goal is to accelerate economic growth by stimulating and supporting business-led innovation. Sponsored by the Department for Business, Innovation and Skills (BIS), the Technology Strategy Board brings together business, research and the public sector, supporting and accelerating the development of innovative products and services to meet market needs, tackle major societal challenges and help build the future economy. For more information please visit <a href="www.innovateuk.org">www.innovateuk.org</a>.

## Smart

Managed by the Technology Strategy Board, the Smart scheme offers funding to small and medium-sized enterprises (SMEs) to engage in R&D projects in the strategically important areas of science, engineering and technology, from which successful new products, processes and services could emerge. http://www.innovateuk.org/deliveringinnovation/smart.ashx