23 January 2017

ALL SYSTEMS GO!

Doors open at PBL's new joint venture spin-out: Leaf Systems International

23rd January 2017: Leaf Systems International Ltd was today officially opened by Jo Johnson, Minister of State for Universities, Science, Research and Innovation.

The science behind Leaf Systems was developed under BBSRC funding at the John Innes Centre by Professor George Lomonossoff and Dr Frank Sainsbury. PBL has built a portfolio of patents on this platform technology - known as Hypertrans® - for producing proteins with unrivalled speed and efficiency. Prof Lomonossoff won the BBSRC Innovator of the Year award in 2012. Leaf Systems International, which is now commencing operations at the newly-opened facility on the Norwich Research Park, is a joint venture between PBL, John Innes Centre and BBSRC.

Leaf Systems will use the Hypertrans® platform to produce proteins in plants such as vaccines, antibodies or enzymes. The proteins can then be extracted through crushing the leaves and purifying the product. The speed of the system means that it can rapidly produce large amounts of protein and so it is well suited to rapidly responding to emergencies like pandemics. Other potential uses include producing many proteins at the same time and so creating new biochemical pathways for producing complex 'bioactive' molecules such as novel anti-cancer drugs and anti-infectives.

Universities and Science Minister Jo Johnson said, "UK science and research is world-leading and has played a key role in some of the most revolutionary discoveries of our time. Science will be at the core of the Industrial Strategy, maximising its potential to support local growth and drive investment through commercial partnerships."

Echoing the Minister's comments, **PBL's Managing Director, Dr Jan Chojecki said,** "Leaf Systems shows how basic research in plants can have far-reaching applications with huge potential benefits to mankind. It also highlights the quality of the innovation infrastructure supporting UK science to develop strong intellectual property and deliver economic impact."

Leaf Systems will provide services to companies and research organisations by producing to order these valuable proteins and other natural products to enable both public and commercial research, and to underpin commercial product development. Hypertrans® is also licensed by PBL to commercial partners such as Medicago Inc (Quebec), please click here for more information.

Professor Lomonossoff said, "The opening of the Leaf Systems facility represents the culmination of many years of research by myself and colleagues into fundamental virology. There is something rather magical about seeing these efforts being translated into the formation of a company, the construction of a building and the potential for great impact".

Professor Dale Sanders, Director of the John Innes Centre said, "The John Innes Centre attaches priority to the commercial valorisation of our science. Leaf Systems is an excellent example of that prioritisation, highlighting as it does the enormous potential of plant science for both public good and economic growth".

Chief Executive of BBSRC, Professor Melanie Welham said, "Leaf Systems is the result of long-term strategic investment in UK research and shows the strength of our bioscience community to not only produce ground breaking science but also to harness that knowledge to create new companies, products and services and foster economic growth."

For more information on the Hypertrans® technology, please click here.