



CONGRATULATIONS to Prof George Lomonosoff

Prof George Lomonosoff has been named BBSRC Innovator of the Year 2012, for his innovations for his work that has led to a plant-based production system for manufacturing proteins.

The system ([CPMV](#) and [CPMV-HT](#) Protein Expression) is faster than current methods and so it offers an extremely effective way of making proteins such as vaccines rapidly, as needs arise. His work is already being used by [Medicago](#), a Canadian biotechnology company, [to develop a vaccine for the H5N1 avian influenza virus under licence from PBL](#).

Prof Lomonosoff said: "Our collaboration with PBL has brought about the rapid adoption of the CPMV-HT technology by both academic groups worldwide and by the commercial sector. This, in turn, has led to the technology being utilised for purposes even beyond those originally envisaged."

The Innovator of the Year Award is a competition designed to recognise and reward scientists who are ensuring that the UK's excellent bioscience research is translated into outcomes that positively affect quality of life for everyone. In total nine finalists competed in three categories to be named BBSRC Innovator of the Year at an award ceremony in London on March 28th. Another PBL project, Beneforté broccoli, developed by Richard Mithen of the Institute of Food Research, Norwich, was among just nine cases short-listed from around the UK. The awards were presented by the Rt Hon Dr Vince Cable MP, Secretary of State for Business, Innovation and Skills and President of the Board of Trade.

"I would like to congratulate George on winning this award" said Professor Dale Sanders FRS, Director of the John Innes Centre. "The advantages of the technology, in terms of speed and yield, have meant that it has been widely adopted by both the academic and commercial sectors for the production of foreign proteins and the manipulation of plant metabolism."

The CPMV-HT system uses elements of Cowpea Mosaic Virus to achieve high levels of heterologous protein expression in plants, without the need for virus replication. It greatly increases both the speed and efficiency of protein production in plants, without producing infectious virus particles, which is one reason why Medicago Inc have used this method to scale up production of vaccines to commercial levels.

The technology was developed with former JIC-student Frank Sainsbury, who won the John Innes Foundation Prize for Excellence in Scientific Research for his PhD thesis on this work. After leaving JIC, Frank progressed to a post-doctoral position at the University of Laval, Canada, where he continues his exciting studies on the production of high-value proteins in plants.

Other technologies developed by George Lomonosoff are also available from PBL:

[04.355 - CPMV RNA Mimics](#)

[09.474 - Empty VLP Nanoshells](#)