



PBL NEWS

Flying start to 2006

New award for technology development and marketing

2006 has got off to an exciting start with the news that PBL has won £1.9m under the DTI/OST's Public Sector Research Exploitation Fund, one of the largest of 29 awards made under this £25m round.

The award will be used to top up our previously announced Technology Development Fund which has already been very successful in accelerating commercial uptake of emerging technology.

The bid was led by PBL and supported by BBSRC. The funds will also help strengthen the marketing of technologies developed at BBSRC-sponsored Institutes such as Rothamsted Research, The Institute of Grassland and Environmental Research, The Institute of Food Research and The John Innes Centre.

New research findings in cancer-fighting broccoli

Professor Richard Mithen, who developed new varieties of broccoli providing elevated levels of cancer protective compounds (particularly sulforaphane) has published new research findings in The American Journal of Clinical Nutrition.

The research carried out at the Institute of Food Research shows that there are genetic differences among individuals such that some people would be more likely than others to benefit from the cancer-protective effects of a diet containing broccoli. However, the new broccoli varieties deliver higher levels of sulphoraphane in the diet and are likely to afford the cancer-protective benefits to all consumers, regardless of their genotype.

Professor Mithen's varieties are patented by PBL and licensed to Seminis Inc.

Full reference :
(Am J Clin Nutr;
82: 1283: 2005).



PBL Contact :
Dr Jan Chojecki

PBL grants further RNAi Licenses

PBL has recently signed commercial licences on two of its RNAi based silencing technologies. These licences are based on two of PBL's pivotal technologies in the gene silencing field:

1) micro RNA technology, invented by Professor Vicki Vance at the University of South Carolina. Following the emergence and recognition of siRNA's in gene silencing, Professor Vance was the first scientist to recognise and deduce the importance of micro RNAs in plant gene regulation, especially within the regulation of plant development. The technology provides an extremely useful and versatile tool to influence plant development and makes use of the developmental regulation mechanism.

2) siRNA technology, Professor David Baulcombe and Dr Andrew Hamilton at the Sainsbury Laboratory first published in Science (Vol. 286, pp950-952, 1999) their invention regarding the identification of short RNAs as effector molecules for gene silencing. The invention has led to the use of siRNAs (short interfering RNAs) as effectors to induce gene silencing in organisms both for *in vivo* and *in vitro* applications.

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Funding awarded for Bacterial Strain Optimisation business project

PBL have successfully assisted Dr Michael McArthur of the John Innes Centre in winning funding to cover the development of novel molecular technologies specifically designed for application in bacterial strain optimisation.

As well as receiving funding from PBL's Technology Development Fund (www.pbltechnology.com), the project has also recently been awarded a £20k Pathfinder award from the Icení Seedcorn Fund and £60k in BBSRC Follow-on-Funding for Dr McArthur to continue his work in designing novel tools for the metabolic optimisation of *Streptomyces* and other Bacterial species.

IP protection

Funds and manages patent filing and prosecution

Builds complementary technology packages

Markets technology to commercial users

Concludes and monitors technology licences

Manages and mentors the formation of new technology-based businesses

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IFR's Buffering Theory Software : Licensed

PBL is pleased to announce that it has concluded a licensing agreement with Hamilton Grant Software Ltd to develop and commercialise the Buffering Theory Software developed at the Institute of Food Research (IFR). Hamilton Grant are world leaders in specialist software for food manufacturers, retailers, ingredient suppliers, and food service companies.

Buffering Theory Software has been developed by scientists at the IFR and enables pH predictions to be carried out for real food systems. The acid-base behaviour of individual ingredients (such as juices) are characterised and the data combined to produce an algorithm to describe the buffering capacity of the system of interest. Then, known pH modulating ingredients (such as organic acids) can be applied to reach a target product pH. Hamilton Grant have now commenced sales of this innovative software product.

(www.hamiltongrant.com)

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Patents Granted:

US & EUROPEAN Patents Granted

EP1235483B1: CIS-JASMONE AS SEMIOCHEMICAL

Grant date: 2005-02-16

ABSTRACT: Use of cis-jasmone as a semiochemical which can attract or repel selected insects and which can, e.g., effect gene expression leading to production of attractants or repellents by plants

EP1407000B1: TRANSFORMATION METHOD AND TRANSGENIC PLANTS PRODUCED THEREBY

GRANT DATE: 2005-11-30

ABSTRACT: Producing population of transgenic plants involves transforming plant cell with minimal transgene expression cassette by direct DNA transfer techniques and regenerating transgenic plants from transformed cells

PBL assist in commercialisation of National Yeast Culture collection

PBL has been leading the way in the re-launch of the UK's largest collection of yeast strains, the National Collection of Yeast Cultures (NCYC). The collection of over 3200 strains is based at the Institute for Food Research (IFR) in Norwich and is one of the largest repositories of yeast strains in the world.

PBL have been working closely with IFR staff to market NCYC's services within a wide range of target industries, particularly in brewing, food and biotechnology. We have also initiated a new NCYC website with an online purchasing capability. This new site www.ncyc.co.uk showcases the range of scientific services available at NCYC, including culture storage, characterisation and identification of yeast strains, as well as NCYC's contract research capabilities.

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