

Knowledge Transfer Partnerships

KTP BENEFITS

Knowledge Transfer Partnerships are designed to benefit everyone involved

- 🔄 Businesses will acquire new knowledge and expertise
- 🔄 KTP Associates will gain business-based experience and personal and professional development opportunities
- 🔄 Universities, colleges or research organisations will bring their experience to enhance the business relevance of their research and teaching

Knowledge Transfer Partnerships

Accelerating business innovation; a Technology Strategy Board programme

<http://www.ktponline.org.uk>

CULTECH LTD KTP ASSISTS THE SUCCESS OF BIOTECHNOLOGY COMPANY

ABOUT THIS CASE STUDY

This Knowledge Transfer Partnership (KTP) successfully brought together Cultech Ltd and Cardiff University. The aim was to develop a product to support the application of probiotic products for prophylaxis of antibiotic induced hospital-based infections.

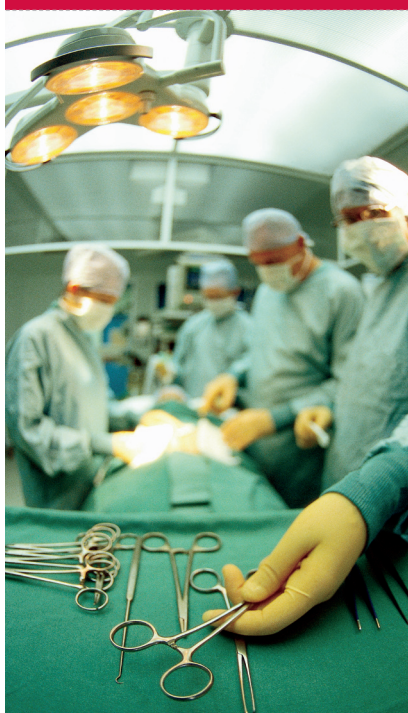
ABOUT THE SPONSOR

The Technology Strategy Board is a business-led organisation established by the Government. Its mission is to accelerate research into, and development and exploitation of, technology and innovation for the benefit of UK business - building economic growth and quality of life.

FAST FACTS

- 🔄 KTP has increased knowledge to enable an expansion in product range
- 🔄 Successful investigation into antibacterial effects of garlic against MRSA
- 🔄 Successful re-launch of plant antimicrobial range of products
- 🔄 Increase in sales anticipated of about £10,000
- 🔄 Experience and enhanced career opportunities for Associate
- 🔄 New case study material and research opportunities for University staff

The Company



“Collaboration with Cardiff University has brought us new opportunities and a marked increase in our knowledge which will benefit the Company greatly.”

Dr Nigel Plummer, Director, Cultech Ltd

Cultech Ltd combines innovative research with a confident manufacturing capability. The Company carries out contract freeze drying and manufactures both nutritional supplements and biospeciality products. Founded in 1994 by biotechnologists Nigel and Sue Plummer, Cultech Ltd operates from three sites in South Wales. The Company recognised the potential benefits to the business of working with Cardiff University and set about implementing a KTP project.

ABOUT THE PROJECT

The original aim of the project was to gain a greater insight into the extent of MRSA infections within a hospital environment and use probiotic supplementation as a prophylactic to try and minimise the incidence of infections on the wards. The project successfully identified a suitable probiotic but was unable to fully assess its efficacy in a clinical trial. However, there were promising results from an associated project and it was decided that an

acceptable alternative would be to expand the investigation into antibacterial effects of garlic against MRSA, and the synergistic effects of garlic and antibiotics against these infections.

BENEFITS

As a result of the revised goals, the project has resulted in useful data that has been prepared for publication and is intended to boost product sales in the USA and Canada.

The KTP supported an academic research programme which has provided the basic data that is needed for the development of novel, innovative products and the promotion of the products in the market. The Company's plant antimicrobial range of products

has benefited from the increased knowledge as a result of the KTP, and has prompted the re-launch of the business so that the product range is set to expand, which will boost the sales performance. The Company has invested in new equipment to support this research.

It is anticipated that the plant antimicrobial range of products will bring an increase in sales of about £10,000. By the close of the project, the annual sales turnover was just under £5.8 million.

Cultech's main retail marketplace is within the USA and so it is anticipated that £6,000 - £8,000 of sales resulting from the KTP will occur as exports. In

the three years following the completion of the KTP, annual profit before tax is expected to rise by between £5,000 and £10,000.

RESULTS

- 🌀 KTP has increased knowledge to enable an expansion in product range
- 🌀 Successful investigation into antibacterial effects of garlic against MRSA
- 🌀 Successful re-launch of plant antimicrobial range of products
- 🌀 Increased export sales anticipated from findings
- 🌀 Expected increase in sales of about £10,000

The Associate

“The project has been a success for all partners. It has been a very useful way of acquiring new skills and experience to further my career within the scientific community.”

Dr Simon Cottrell, KTP Associate

BENEFITS

The Associate used his PhD in biochemistry to advantage in this project and also had the chance to diversify his range of interests. He successfully designed and carried out an original research project. The results have been communicated at various international meetings and seminars.

The Associate has acquired skills in time and project management and an ability to find solutions. During the placement he has also gained greater confidence and skill in chairing meetings and promoting findings to fellow scientists and clinicians. The project has given him an insight into the needs of a small to medium-sized business (SME) involved in commercial biotechnology. The experience has helped him to prepare for his next career milestone which will be to work in a laboratory overseas.

RESULTS

- 🌀 KTP has provided personal and career development
- 🌀 Success in designing and carrying out an original research project
- 🌀 Better understanding of the needs and demands of an SME
- 🌀 Subsequent experience of working for the Company on a consultancy basis

The Academic Partner

CARDIFF
UNIVERSITY

PRIFYSGOL
CAERDYDD

“KTP brings together an exciting mix of skills, expertise and enthusiasm which can work for the benefit of everyone involved.”

Dr Martin Day, Lead Academic
School of Biological Sciences,
Cardiff University

BENEFITS

The University has benefited from a greater understanding of the scientific needs and technical requirements of a small scientific company.

The project has generated material suitable for publishing, new student research projects and a teaching course about the problems associated with MRSA in human disease. The benefits of the KTP have fostered interest from both partners in developing future KTP projects.

RESULTS

- 🌀 Opportunities realised for published papers, research and teaching material
- 🌀 Mutually beneficial links created with the Company
- 🌀 Greater understanding of the scientific and technical needs of an SME
- 🌀 Further collaborative work with the Company is planned