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

ABOUT THIS CASE STUDY

The aim of this Knowledge Transfer Partnership (KTP) was to enable the Sea Fish Industry Authority (Seafish) to help industry prevent the loss of fish stock and improve the success rate of marine projects. By conducting research into immunology, the marine fish industry would then be able to develop effective fish vaccination techniques to protect and create stronger fish stocks, reducing financial losses and improving profitability.

ABOUT THE SPONSOR

The Scottish Government is the devolved Government for Scotland. It is responsible for most of the issues of day-to-day concern to the people of Scotland, including health, education, justice, rural affairs, and transport.

FAST FACTS

○ Seafish provided information to industry that could lead to cost savings and increased profitability
○ New vaccination capabilities generated future research opportunities
○ Project success rate was significantly improved
○ The Associate gained valuable experience, contributing to career development
○ The knowledge base Partner improved teaching areas through new found knowledge

SEA FISH INDUSTRY AUTHORITY
CATCHING THE ATTENTION OF THE SCOTTISH GOVERNMENT

Seafish is a leading professional body that conducts research, development and training for all sectors of the UK fish industry. It provides organisations with advice and expert knowledge on a wide variety of industry issues, as well as addressing the most significant areas for study that affect the industry to aid market development.

ABOUT THE PROJECT

Seafish wanted to develop effective vaccines to prevent significant loss of haddock and cod stocks and create cost savings in the areas of medical treatment and stock replacement, as well as increasing the success of marine project work.

The company needed to investigate the immune systems and processes of the fish species in order to develop effective vaccination techniques and disseminate this to the marine farming industry.

“I am delighted with the outcome of the partnership with the University of Aberdeen in transferring the knowledge and expertise in fish immunology and vaccine development to the marine farming sector in Scotland.”

Dr Treasurer, Research Manager, Ardtoe

The Company
“The KTP partnership has highlighted the potential for a successful collaboration between the scientific research we carry out at the University and industry. As a result of this project we have published three scientific papers and I was awarded a PhD in zoology and an NVQ Level Four in Management, allowing me to continue my career in research.”

Yolanda Corripio-Miyar, KTP Associate

The KTP helped Seafish develop pilot vaccines for haddock by significantly increasing the industry’s knowledge of immunology. The industry gained valuable insight into how fish fight disease and how this can be used to develop vaccination strategies to improve survival and welfare. This led to new research opportunities with commercial vaccine companies, as well as creating a best practice approach to fish vaccination techniques.

The Marine Aquaculture Industry also made significant cost savings in the area of medical treatment for fish. By developing effective vaccines, the industry was able to protect the fish stocks and prevent the need for treatment of disease with antibiotics. The trials also created stronger fish stocks that had a higher survival rate and the need for fish replacement as a result of mortality was significantly reduced; creating substantial cost savings for the authority in marine project work.

It also improved the project success rate of the authority, increasing profitability and reducing the financial losses of project failures.

The new capability to carry out fish vaccination trials reinforced Seafish’s position as a leading research body in the industry and generated increased interest from feed and vaccine companies for future partner projects.

**RESULTS**

- Stronger fish stocks improved project success rate and increased profitability
- Reduction in treatment costs and stock replacement generated major cost savings
- New research opportunities created
- Increased knowledge and expertise among staff

**BENEFITS**

- Wide range of personal and professional development
- Participated in national and international scientific conferences
- Published three research papers in peer reviewed journals based on the KTP scheme
- The project work formed the basis for a thesis which was accepted for a PhD in zoology
- Became a member of The Fisheries Society of the British Isles

**The Associate**

**The Academic Partner**

“Our work has the potential to help production of a fish species newly introduced to Scotland’s aquaculture industry.”

Professor Secombes, Lead Academic

The project was facilitated by the University of Aberdeen’s Department of Zoology. The department gained valuable insight into immunology, as well as having access to materials on the biology of haddock, an under-studied area for the University that expanded its teaching and research capabilities.

The KTP enabled the school to bring real world, practical application and experience to the research of fish immunology, which will further enhance its teaching and research of this area.

The project has also introduced the subject of marine aquaculture to the postgraduate population in the University’s School of Biological Sciences, increasing the students’ educational development.

The profile of the University has been raised through presentations made by the Associate at a variety of international conferences, creating a positive reputation for the School in this research field.

**RESULTS**

- Increased commercial knowledge in the area of fish immunology
- Produced research papers based on the KTP
- Improved staff knowledge and professional development
- Applied valuable insight from KTP to University courses
- Raised the profile of the University
- Rewarded with new research project