Medical Xpress

Spin-out to apply new technology for tackling infection

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A new company has been launched to commercialise an award-winning technology, developed at the University of Strathclyde in Glasgow, for tackling bacterial infection and contamination, including superbugs such as MRSA.

Fixed Phage Limited has been established to develop products based on its patented technology for treatment and prevention of infection and bacterial contamination in medicine, food safety, environmental sanitation and many other areas.

Initially the company will focus on wound care applications, and having already proven the technology's effectiveness in a prototype wound closure product, this will be extended to wound dressings able to combat those bacteria causing wound infections, such as MRSA.

The technology enables the powerful anti-bacterial properties of bacteriophages- naturally occurring viruses which are non-toxic to humans, animals and plants but which can destroy bacteria- to be incorporated into new and existing products.

Scottish venture capital company Barwell PLC is providing capital to support the new venture, in partnership with Scottish Enterprise's Scottish Co-Investment Fund, and is hopeful that the company will generate new jobs and opportunities. Working alongside industry, Fixed Phage plans to create, test and produce a wide range of antimicrobial products.

The initial development of the technology was funded through the former Synergy Fund, owned by Strathclyde and the University of Glasgow, and through Scottish Enterprise's Proof of Concept Programme.

Dr Mike Mattey, Honorary Lecturer at the Strathclyde Institute of Pharmacy and Biomedical Sciences and Chief Scientific Officer of Fixed Phage, said: "Bacterial infection is a huge challenge for hospitals and healthcare; and can be at least as harmful to patients as the illnesses they are being treated for.

"We have had highly promising trial results with a prototype and are looking forward to delivering treatment to the patients who need it and cost-effective solutions for the health professionals who look after them. We have been able to stabilise bacteriophage and develop the technology for application in combating these infections."

Dr Jim Chadwick, Chief Executive of Fixed Phage, said: "The terrific potential of bacteriophage as an agent to combat infection has been known for some years but it has proved difficult to incorporate into products that are easily manufactured and offer patent protection. This superb technology, invented in Scotland, allows both these objectives to be achieved simultaneously and a prototype has been demonstrated in rigorous trial.

"FixedPhage technology can be applied to prevent infection from appearing or deal with established infection, and unlike antibiotics, has the advantage that bacteriophage constantly overcome bacterial resistance and once established, the bacterial destruction process becomes self-amplifying."

"We have shown the technology to be effective in combating infection and the model gives us options for many other applications. We

anticipate significant commercial interest, particularly from the pharmaceutical industry."

Strathclyde Institute of Pharmacy and Biomedical Sciences, where the technology was discovered, is a pioneering centre for developing new medicines for illnesses and conditions including infectious diseases, cancer, heart disease and arthritis. An £8 million fundraising campaign is underway for the Institute's new £36 million building, to expand and enhance its innovative medical research, education and discovery capability to continue providing solutions to major health care problems.

In November 2010, Fixed Phage Ltd was the winner of the Life Science Innovation Award at the 2010 Nexxus Annual Life Science Awards (West), run by the networking organisation for Scotland's life scientists.

Initially, the new company will be based at, and contactable at, the University of Strathclyde.

The spin-out agreement was negotiated for Strathclyde by Dr Catherine Breslin, Research & Knowledge Exchange Manager, and Louise McKean, Contracts Manager, of the University's Research & Knowledge Exchange Services.

Provided by University of Strathclyde