£3.8m brings pioneering lung imaging devices closer to clinic

A £3.8 million funding boost will advance the development of next generation medical devices that monitor disease deep inside the lungs.

The investment will enable researchers to further develop systems that could revolutionise how lung diseases are investigated, diagnosed and treated.

It will also help the team launch a new facility to accelerate the development of healthcare technologies.

Scientists, engineers and doctors are working alongside regulatory, legal and business experts on the project – called Proteus.

Since the project launched in 2013, the team has designed and created a range of chemical probes to detect the presence of diseases in the lungs.

The probes can rapidly and accurately diagnose bacterial infections, helping to ensure patients are given appropriate treatments.

The team have also devised cutting edge light sensing technologies, including a camera that can detect sources of light inside the body to enable doctors to track medical tools used in minimally invasive procedures.

£3.8 million has been awarded by the Engineering and Physical Sciences Research Council (EPSRC) to continue to support the research for the next five years. Proteus has been backed by EPSRC since it was launched in 2013.

The investment will enable researchers to further develop the technology for clinical use, develop new world-leading technology and accelerate commercial translation.

Proteus is led by the University of Edinburgh in collaboration with the University of Bath and Heriot Watt University. Experts from Durham University are joining team for the next phase of the project.

The project will also be supported by 15 PhD students at Edinburgh and the partner universities.
Professor Mark Bradley, Director of Proteus from the University of Edinburgh’s School of Chemistry, said: “This investment will allow us to push the technology into multiple new areas of application. It will also enable us to develop project sustainability and support staff development and independence. As part of the project, we are investing in a unique facility that will allow the rapid bench-to-bedside transfer of the project’s technology.

Professor Robert Thomson, of Heriot-Watt University’s School of Engineering and Physical Sciences, said: “The project offers tremendous potential in not only assisting in the early diagnosis of lung disease but ultimately in how it is treated. Through this latest investment award we can accelerate the development of Proteus technologies for the betterment of the medical field.”

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