Experts win support to tackle rising threat of antibiotic resistance

A team of scientists are to pool their expertise to tackle one of the biggest health challenges facing society - the ability of common infections to resist drug treatment.

A newly created research facility is to bring together scientists from a range of disciplines to address the problem, which is estimated to cause 700,000 deaths each year.

A £411,000 award from the Garfield Weston Foundation will support the creation of the lab, to be housed in the refurbished Darwin Building at the University's King's Buildings campus.

The development takes place as many bacterial, parasite and viral infections evolve to fight against drugs, making conventional treatments ineffective. The problem is caused by a number of factors that enable and encourage microbes to develop resistance to commonly used drugs and, if it continues unchecked, common infections could become deadly.

Scientists in the facility, which will be part of a flagship building redevelopment at the University of Edinburgh, will seek to better understand the ways in which bacteria, parasites and viruses are developing resistance to treatments, and how best to address this.

Dozens of researchers, and their collaborators around the world, will work to aid scientific knowledge and understanding of resistance to antibiotic or antiviral treatments - collectively known as antimicrobial resistance - in people and animals.

They will aim to help develop fast diagnostic tests for infection, to improve how drugs are prescribed. The team will also seek to support development of vaccines and alternative treatments for infection.

Researchers will aim to build on the University's first class capabilities in biology, medicine and veterinary medicine, and its links with top researchers and clinicians around the world.

The Darwin Building upgrade at the University's science and engineering campus will feature nine floors of labs, including the antimicrobial facility, and suites of analytical equipment. Its open plan aspects are designed to foster collaboration.

The University's historic post of Professor of Natural History, which was established in 1770, will be reintroduced as head of the lab dedicated to antimicrobial resistance.
Professor Keith Matthews, of the School of Biological Sciences, said: "Antimicrobial resistance is one of the greatest challenges facing society today, both in terms of human health and wellbeing, and in the stability of our livestock farming. This support from the Garfield Weston Foundation ensures that Edinburgh will remain at the forefront of the fight against AMR research for years to come."

Philippa Charles, Director of the Garfield Weston Foundation, said: "We are delighted to be able to support the important and innovative work on antimicrobial resistance at the University of Edinburgh. This kind of cutting-edge scientific research, with tangible societal benefit, is exactly the kind of initiative which the Garfield Weston Foundation aims to encourage. AMR is a huge threat to all of us and we are proud to be able to support the University in tackling this, and other global challenges, through their 'Building a New Biology' project."

For more information please contact:
Catriona Kelly, Press & PR Office, 0131 651 4401; 07791 355940; Catriona.Kelly@ed.ac.uk