



THE UNIVERSITY *of* EDINBURGH

News Release

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£11.4m research boost aids quest for healthcare solutions

Research into drug discovery and healthcare will be accelerated with a multi-million pound investment.

Scientists are to receive £11.4 million over five years for a new centre to advance research in synthetic biology – the design of biological organisms with new or improved functions.

Researchers will explore how stem cells can be reprogrammed for use in personalised medicines, help to create improved safety tests for new treatment, and build tools to help identify new types of drugs.

The award to the University of Edinburgh's Centre for Mammalian Synthetic Biology was announced today by Rt Hon Vince Cable, Secretary of State for Business, Industry and Skills. It is part of a £40 million UK-wide investment in the emerging discipline.

As part of the new investment, researchers at Edinburgh will also lead two collaborative projects. These will help create the building blocks of synthetic biology – fragments of DNA needed to create useful biological components.

These projects include a £2.4 million plan by the Universities of Edinburgh and Liverpool to study the rapid design and synthesis of DNA circuits.

An additional £2 million project involving the University of Cambridge and the Genome Analysis Centre will seek to enhance the national capacity of synthetic DNA design and manufacture. It will also work to ensure the UK is internationally competitive in the field.

Synthetic biology research centres will also be created at the Universities of Manchester and Warwick.

The £40 million investment is made by the Biotechnology and Biological Sciences Research Council (BBSRC), the Engineering and Physical Sciences Research Council (EPSRC), the Medical Research Council (MRC) and the UK Government.

Professor Susan Rosser, Chair in Synthetic Biology at the School of Biological Sciences and Engineering, and Director of the Centre for Mammalian Synthetic Biology, said: "This further strengthens Edinburgh's position as a leading centre for synthetic biology in the UK. Applying this powerful technology for human medicine is still in its infancy but Edinburgh is

Ranked among the top universities in the world

well positioned to take a lead with its pioneering research in cell biology, stem cells and epigenetics.”

Professor Peter Swain, Director of the University of Edinburgh’s synthetic biology research group SynthSys, said: “This new funding recognises Edinburgh’s role as one of the leaders of synthetic biology in the UK. We are excited about bringing together two of the university's strengths: regenerative medicine and systems and synthetic biology.”

Jackie Hunter, BBSRC Chief Executive, said: “Through previous investments BBSRC, along with funding partners, has been able to position the UK as a world leader in synthetic biology. This new package of investments will ensure that the UK maintains this leadership position and continues to drive the potential of synthetic biology to contribute to the economy and society.”

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