Expanding Excellence in England (E3) Round 1 – Funded Projects

Aston University

Unit name

Aston Institute for Forensic Linguistics

Investment

£5,434,597

Summary

The current Centre for Forensic Linguistics will radically expand into an institute with capacity to exploit strengths in investigative text analysis, linguistics in legal contexts, and forensic speech science. It will also establish capability in language and law and create an open databank for research and practice in forensic linguistics.

Loughborough University

Unit name

Centre for Mathematical Cognition

Investment

£6,594,814

Summary

Loughborough University's new Centre for Mathematical Cognition represents a substantial expansion of Loughborough's internationally recognised mathematical cognition research. The Centre will study mathematical learning processes and use the resulting insights to design and evaluate educational interventions. A collaborative network of schools and colleges will ensure the Centre's work addresses classroom priorities.

Newcastle University (with Northumbria University)

Unit name

Hub for Biotechnology in the Built Environment

Investment

£8,000,000

Summary

The Hub for Biotechnology in the Built Environment is a collaboration between Newcastle and Northumbria Universities that will develop biotechnologies to create a new generation of buildings which are responsive to their environment, grown using engineered living materials, metabolise their own waste, and modulate their microbiome to benefit human health.

Open University

Unit name

Astrobiology Research Unit

Investment

£6,737,350

Summary

The Open University Astrobiology Research Group is a multidisciplinary research community focusing on fundamental questions about life beyond the Earth. The E3 funding will enable its expansion to address scientific and governance challenges within astrobiology, particularly in relation to space exploration, societal benefits and sustainability.

Royal Northern College of Music

Unit name

Practice and Research in Science and Music

Investment

£914,000

Summary

E3 funding will enable the RNCM’s Centre for Practice & Research in Science & Music (PRiSM) to bring together researchers and practitioners in composition, performance, mathematics, artificial intelligence, music perception and big data to engage in creative research collaborations between the sciences and music. A unique approach within UK HEPs and distinct worldwide, it will address fundamental questions about what it means to be human and creative today.

Sheffield Hallam University

Unit name

Lab4Living

Investment

£4,027,482

Summary

This award expands Lab4Living’s capacity to advance its groundbreaking research in the development of innovative products and environments that promote quality of life. The Design4Ageing Academy, an international host hub, and resource to build future leaders in this space will form part of a systematic program of research activity centring on the ‘100 Year Life’.

University of Exeter

Unit name

Diabetes Research Unit/ Aetiological Insights

Investment

£5,984,000

Summary

Exeter Diabetes Research has an international reputation for delivering excellent and clinically-relevant patient-based research. We will expand by recruiting individuals with interdisciplinary skills and innovative ideas, who are seeking to apply their expertise to the underlying mechanisms in diabetes. State of the art imaging and sequencing equipment will be provided.

University of Greenwich

Unit name

Natural Resources Institute

Investment

£7,495,984

Summary

The Natural Resources Institute (NRI) of the University of Greenwich will expand its existing interdisciplinary research excellence addressing food and nutrition security, especially in Africa. Using a food systems approach, NRI and partners will focus on climate change, sustainable agricultural intensification, food loss and waste, and improved nutrition.

University of Lancaster

Unit name

ImaginationLancaster

Investment

£7,636,606

Summary

Beyond Imagination provides fresh perspectives on real world issues and facilitates innovation by addressing complex challenges faced by cities, communities, factories, workplaces and homes. Our design research creates a uniquely powerful socio-technical bridge between academic disciplines, industry, society and policy, transforming future products, places and services.

University of Lincoln

Unit name

Lincoln Agri Robotics

Investment

£6,344,000

Summary

This project creates Lincoln Agri-Robotics, the first global centre of excellence in Agri-Robotics in the UK. This will include research into autonomous agri-robots that can efficiently tend, harvest and quality-control high-value crops with reduced human intervention, improving agricultural productivity and environmental sustainability, and addressing the demands of a growing population.

University of Portsmouth

Unit name

Centre for Enzyme Innovation

Investment

£5,828,000

Summary

The Centre for Enzyme Innovation (CEI) at the University of Portsmouth is helping to solve the global challenge of plastic pollution through the discovery and engineering of enzymes to breakdown common single-use plastics. This pioneering research will enable the circular recycling of plastic waste.

University of Surrey

Unit name

Centre for Translation Studies

Investment

£3,564,000

Summary

Automation is rapidly transforming the language services landscape, shifting industry practice and the research agenda in the direction of technological innovation. To harness the full potential of the AI revolution in this area, we will focus on the convergence of human and automated approaches to different modalities of translation and interpreting, combining them to create an ambitious and far-reaching research programme.

UWE

Unit name

Centre for Fine Print Research

Investment

£7,718,713

Summary

The Centre for Fine Print Research will build on its unique knowledge of 19th century photomechanical, traditional printing and fabrication to develop novel methods and artefacts, exploring crossovers between art, science, and engineering. The vision is to solve real world problems, transforming ideas into physical artefacts that meet the needs of a changing society.