RED Fund – list of projects being funded

Lead Provider	Project title	Funding
City, University of	CebAI: A National Centre for Creativity Enabled	£3,569,113
London	Artificial Intelligence	
Coventry University	Community-led Open Publication Infrastructures for Monographs (COPIM)	£2,202,947
King's College London	Delivering Increased Wealth and Improving Health; a Unified Place-Based Approach	£1,920,000
Newcastle University	, , , , , , , , , , , , , , , , , , ,	£2,699,000
Newcastle University	National Innovation Centre for Rural Enterprise (NICRE)	£3,755,829
Royal College of Art	Design Age Institute	£4,996,543
University College London	Capabilities in Academic-Policy Engagement (CAPE)	£3,953,144
University of Birmingham	The West-Midlands Regional Economic Development Institute (WM-REDI) @ The Exchange	£4,913,977
University of Cambridge	TenU	£260,500
University of Cambridge	Policy Evidence Unit for University Commercialisation and Innovation (UCI)	£1,199,833
University of Liverpool	Enhancing first-time postdoctoral career development and success	£3,630,250
University of Northumbria	Purposeful Healthcare Growth Accelerator	£361,854
University of Nottingham	TALENT: Advancing status and opportunity for the technical community in UK higher education	£3,048,451
University of Nottingham	Midlands Centre for Data-driven Metrology (MCDDM)	£2,933,532
University of Oxford	Creative Destruction Lab	£2,647,400
University of Oxford	Oxford UIDP Summit 2019	£20,000
University of Plymouth	Cyber-SHIP Lab	£1,682,001
University of York	The Screen Industries Growth Network (SIGN)	£4,899,000
University of Surrey	Harnessing Small to Medium Enterprise: a new model for SME industry-funded PhD studentships	£370,000
Brunel University	Making the Future Digital	£1,690,000
London Business School	The Newton Programme	£2,541,292
Loughborough University	The Centre for Postdoctoral Development in Infrastructure, Cities and Energy (C-DICE)	£3,980,597
University of Salford	North of England Robotics Innovation Centre (NERIC)	£3,640,829
University of Bath	Innovation Centre for Applied Sustainable Technologies (iCAST)	£4,987,157

Project summaries

Lead provider and total project funding	Summary of project
City, University of London £3,569,113	The project will set up a national centre called CebAI (Creativity enabled by Artificial Intelligence). CebAI will seek to empower businesses to be more creative, on-demand, and hence more innovative more regularly. Building on research in digital creativity, it will support businesses to exploit their assets and existing creativity knowledge through new forms of on-demand software services. Business partners will use this platform and software to amplify their existing creativity consulting, training and leadership services, in order to maximise the value of these services to business clients. CebAI will also disseminate new models, frameworks, offerings and lessons to other higher education providers through a series of conferences and events dedicated to improving institutional practices for creativity and AI knowledge exchange.
Coventry University £2,202,947	Community-led Open Publication Infrastructures for Monographs (COPIM) COPIM addresses the key technological, structural, and organisational hurdles which are standing in the way of the wider adoption and impact of Open Access (OA) books – this includes issues related to funding, production, dissemination, discovery, reuse, and archiving. COPIM will develop modular components to support the sustainable publication of OA books: 1. Infrastructures, including a fully functional consortial library funding platform, and an Open Dissemination System for the integration of OA books into discovery systems; 2. Business models, including an online toolkit and two pilot cases (with existing OA publishers and publishers wanting to transition to OA monographs); 3. Governance processes, including community-approved best practices for the governance of collectively-owned open source infrastructures and OA presses; 4. Strategies to promote OA book content discovery, interaction, and reuse as well as the development of and interaction with emergent genres of scholarship; 5. Preservation structures for the archiving of complex OA books; 6. Outreach programs including extensive knowledge exchange activities with a range of HE and publishing stakeholder partners.
King's College London £1,920,000	Delivering Increased Wealth and Improving Health; a Unified Place-Based Approach

Newcastle University	
£2,699,000	

The project aims to catalyse a significant step-change in the work of two cluster organisations hosted by Newcastle and King's respectively - namely the Northern Health Science Alliance (NHSA) and MedCity. These organisations will scale up activities, building upon current programmes of work, and bring new activities and initiatives forward that supports collaboration between higher education, industry and the NHS. The projects have a strong emphasis on developing a nationally coordinated approach to international outreach in life sciences, and a coordinated response to Industrial Strategy priorities to drive economic growth within the life sciences ecosystem.

Newcastle University £3,755,829

National Innovation Centre for Rural Enterprise (NICRE)

The project will establish a National Innovation Centre for Rural Enterprise (NICRE) to realise a step change in innovation and unlock potential in the UK's rural economies. Working in partnership across multiple stakeholders the Centre aims to have impacts on business practices, people, policy and places. It will do this by:

- Strengthening the evidence base, through a core research programme
- Catalysing rural innovation and enterprise, involving local partners in co-designed place-based demonstration projects
- Informing enhanced policy and enterprise support for rural firms

Royal College of Art £4,996,543

Design Age Institute

The Design Age Institute will act as a national strategic design unit for ageing, thus supporting a key theme of the UK's Industrial Strategy. Working closely with the National Innovation Centre for Ageing at Newcastle University the Institute will provide a range of design services for private and public sector organisations. It will audit the field globally and prioritise action and investment. It will build, coordinate and brief a network of design expertise across the UK, enabling the translation of new ideas and technologies into tangible products and services. Its model will invite expressions of interest and commission design teams from private-sector design firms and higher education providers and coordinate demonstrator projects. The Institute also seeks to shift the public debate around innovation for ageing from low-value products at the point of medical crisis to higher-value inclusive design for active lifestyles.

University College London £3,953,144

Capabilities in Academic Policy Engagement (CAPE)

CAPE has been created to support effective and sustained engagement between academics and policy professionals across the higher education sector. It is a partnership between UCL and the universities of Cambridge, Manchester, Northumbria and Nottingham, in collaboration with the Government Office for

Science, the Parliamentary Office for Science & Technology, the Alliance for Useful Evidence, and the Transforming Evidence Hub.

CAPE will build upon existing evidence of barriers and facilitators to academic-policy engagement in order to pilot interventions catalysing a shift towards enhanced interactions between academia and public policy and a measurable increase in evidence use. These insights will be shared widely across the sector and with policy stakeholders, and will subsequently guide the activities for improved academic-policy engagement piloted within this project.

University of Birmingham £4,913,977

The West-Midlands Regional Economic Development Institute (WM-REDI) @ The Exchange

The project will establish the new institute to provide evidence to strengthen the development and delivery of local industrial strategies. The institute will engage with a broad range of stakeholders to support regional decision-making on the optimum mix of investments for inclusive economic growth amongst a wide range of projects.

To achieve this the institute will:

- develop tools for analysis, evaluation and monitoring, to improve how to select, shape and promote particular innovations, informed by evaluations of the likelihood, timescale and scope of their eventual commercial or social impact, and the likely beneficiaries.
- conduct comparative benchmarking to assess the relative strengths and weaknesses of UK regions, focusing explicitly on regional systems of innovation and the relative alignment of university R&D with user-needs at the local and national levels.
- 3. provide policy support to help shape and implement Local Industrial Strategies (LIS); deliver workshops and training programmes to accelerate three types of economic and social impact: technology commercialisation, innovation in services firms and non-commercial innovation to support improvements in local public services, health and welfare.

University of Cambridge £1,199,833

Policy Evidence Unit for University Commercialisation and Innovation (UCI)

This project will establish a Policy Evidence Unit for University Commercialisation and Innovation (UCI) to help drive a step change in universities' contributions to delivering increased R&D and innovation in the UK. The unit will create much needed capacity to support the needs of UK government departments, funding agencies, and universities for better data, evidence, and expert insights to develop more effective approaches for enabling universities to actively and strategically contribute to commercialisation and innovation. Key activities include:

Targeted evidence studies to fill key evidence gaps identified through close and systematic consultation with key stakeholders Data development projects to improve the quality and robustness of data and metrics available on university commercialisation and innovation Efforts to train and support policy-makers and analysts in using the emerging evidence, concepts and tools in their decision-making activities University of Cambridge TenU £260,500 Building on leading US-UK technology transfer (TT) links, this project will seek to generate insights that can be used to inform policy and to develop practice in both countries. The project aims to: Support US-UK university tech transfer networking, focussing on the TenU collaboration of US-UK universities Disseminate the TenU insights and experiences to the wider HE sector, including insights on opportunities for other/broader US-UK collaborations in tech transfer. Design a 'Future Leaders Programme' to provide rising stars across the sector the opportunity to experience working in a leading TT office. Enhancing first-time postdoctoral career development and University of Liverpool £3,630,250 success Prosper is aimed at opening up the talent pool that exists within the postdoctoral research community, to the benefit of PDRs themselves, employers and the wider UK economy. The four key aims of Prosper are to: 1. Co-create, with employers, and a broad stakeholder group the Prosper model to transform the development of PDR talent, maximising their career options and their value to potential employers. 2. Develop principal investigators (PIs) in recognition of their key role as research leaders, in supporting PDRs and helping to shape their future development and career pathways. 3. Democratise access of first-time PDRs to the Prosper model by creating flexible, innovative modes of development that respond to the diversity and complexity of the PDR community. 4. Ensure roll-out and continuing development of the Prosper model across the HEI sector by involving N8 partners in the co-creation and piloting of the model. It is intended that the Prosper model will be subsequently opening up to universities across the UK in 2023. **Purposeful Healthcare Growth Accelerator** University of Northumbria £361,854 Northumbria University has partnered with NEL Fund Managers Ltd to create a Growth Accelerator specifically designed to prioritise SMEs offering practical solutions to the unmet health and social care needs of the NHS and social care services. The

programme specifically addresses barriers impacting on these SMEs, through: Growth readiness package from expert mentors Innovation voucher providing access to university expertise in product development, evidence gathering and grant funding Loan finance to support SME's ability to grow through knowledge exchange For more information please see Purposeful Health Growth Accelerator University of Nottingham on TALENT: Advancing status and opportunity for the technical behalf of the Midlands community in UK higher education Innovation university The project will lead and influence change to advance the status partnership and opportunities for technical skills, roles and careers in UK £3,048,451 higher education. TALENT will collaboratively deliver technicianled activities providing the evidence, tools and case studies to enable the wider sector to plan and develop their technical workforce. Through the Midlands Innovation consortium of eight providers the project seeks to: 1. Understand future requirements for skilled technicians in the UK higher education sector. 2. Work collaboratively to advocate and deliver a change in culture that will raise the profile of technical careers, roles and contributions, enhancing career pathways and possibilities. 3. Build upon the commitments of partner providers by delivering a programme of training and development opportunities for our technical community of over 2100 FTE and to share the learning with the sector. University of Nottingham The Midlands Centre for Data-Driven Metrology (MCDDM) is a £2,933,532 multi-site collaboration led by the University of Nottingham with Loughborough University and Coventry University. The MCDDM will develop novel technologies to improve in-line measurement within manufacturing processes and share practices to integrate metrology into UK manufacturing companies. The MCDDM will provide support for UK manufacturing workforce to access learning in manufacturing measurement and its application to verification of data for digital manufacturing. It will provide public benefit through the development of technologies that enable manufacturing processes to deliver reduced environmental impact, more reliable products, and improved employment opportunities for skilled workers. More details of the project can be found at www.mcddm.ac.uk. University of Oxford **Oxford UIDP Summit 2019** £20,000 The UIDP summit brought together key influencers in US and European universities, companies and policy makers to explore better ways of working together to enhance commercialisation policy and practices. University of Plymouth Cyber-SHIP Lab

£1,682,001	The primary objective of this project is to deliver a functioning maritime-cyber lab to research security in hardware, software, and protection development. Combining maritime technology and cyber-security labs, the Cyber-SHIP Lab will consist of a secure physical space for academic and industry collaboration. The Lab will host a range of connected maritime systems, enabling technology and human usage to be studied and analysed, and system weakness identified. This will support a range of research and training that cannot be achieved with simulators alone. The project will also facilitate the development and delivery of new maritime cyber provision for graduates, postgraduates and industry.
University of York £4,899,000	The Screen Industries Growth Network (SIGN) The aim of SIGN is to enhance the competitiveness of and future-proof the screen industries in Yorkshire and Humber through a collaborative, business-facing partnership comprising higher education providers working with key local and sector specific stakeholders. The project will establish a city-centre innovation hub and focusses development around four themes: Diversity and Inclusion Research Knowledge Exchange and Innovation Skills, Training and Development
Brunel University £1,690,000	Making the Future Digital This project aims to address the need to build more digital businesses by providing a range of support programmes to new digital early stage companies with a focus on those being planned by graduates and staff from universities in West London. Housed in a new custom designed innovation hub called the Powerhouse, the project will build on Brunel's successful project Making the Future, and its collaboration with the property developer U+I. Making the Future Digital will triple the volume of early stage companies that will be supported, whilst creating jobs and facilitating the development of new digital products and services. It will operate alongside Making the Future in the newly refurbished Powerhouse building in partnership with U+I and its joint venture Plus X. It will facilitate and enhance economic growth with an open and collaborative innovation ecosystem that is both sustainable and informed by the needs of the West London economy and the expertise of the university partners. https://centralresearchlaboratory.com/
London Business School £2,541,292	The Newton Programme This project aims to deliver a training programme (now named 'Newton Venture Program') and is run as a joint venture with a

leading London-based venture capital firm called Senderwood Group Ltd (LocalGlobe VC and Latitude VC funds). It will be innovative in seeking to address the 'talent gap' of Venture Capitalists in the UK and offers support for first-time fund

managers in the UK who are seeking to become General Partners

in venture funds. This programme will help them develop the mind-set, expertise and networks that will enable them to make smart long-term investments in UK-based businesses, which in turn will support the country's productivity and economic growth objectives.

It will upskill the venture capital sector, while broadening the routes through which people can join the industry. The mission is to increase the diversity of backgrounds and experiences among venture investors, through providing training that will unlock the opportunity to thrive. It will deliver impact to individuals who take part in the programme and their firms, other London Higher Education Institutions, and the wider entrepreneurial ecosystem across the UK and EMEA: Home - Newton Venture Program (newtonprogram.vc)

Loughborough University £3,980,597

The Centre for Postdoctoral Development in Infrastructure, Cities and Energy (C-DICE)

This project is establishing a diverse pipeline of talent with the skills and knowledge to address the critical challenges in delivering sustainable infrastructure, cities and energy supply. There is an unprecedented demand for such individuals with over 200,000 vacancies expected over the next decade. C-DICE incorporates the universities of the UKCRIC and Energy Research Accelerator partnerships, capitalising on UKRI investment in research facilities, along with many other industrial and institutional partners. The Centre provides a unique and timely opportunity to directly address recent calls to secure higher-level skills, the research talent of tomorrow, and the capacity to commercialise technological developments. The C-DICE programme tackles:

1. How we build and sustain the advanced skills base required to create a pipeline of world-class talent for the Infrastructure, Cities

- and Energy (IC&E) sectors.

 2. How to accelerate progress towards a net-zero carbon society.
- 2. How to accelerate progress towards a net-zero carbon society by 2050.

Through the Centre, postdoctoral researchers will solve interdisciplinary problems enabling delivery and operation of sustainable infrastructure, cities and energy, while becoming equipped with the skills and knowledge to occupy R&D leadership roles across a range of sectors. It offers a new development programme within which post-doctoral researchers will advance their skills through tailored pathways and innovative, collaborative research activity. For more details visit: www.cdice.ac.uk

University of Surrey £370,000

Harnessing Small to Medium Enterprise: a new model for SME industry-funded PhD studentships

Industry-focused PhD studentships create an opportunity to develop doctoral-level research skills and knowledge that industry needs. However, entry barriers for small & medium enterprises (SMEs) can be high. This proposal introduces a new model for SMEs-led collaborative doctoral level research and training across engineering and physical sciences. It aims to:

- lower pre-competitive research risks for SMEs
- address the affordability to SMEs of research in HEIs through cofunding
- introduce SMEs to academic networks promoting knowledge exchange
- provide SMEs with early engagement with postgraduate students thereby helping them overcome recruitment challenges. The proposal brings together 9 collaborating HEI physics departments to establish the SME-DTN and grow the first focused SME consortia within it. For more information please see: www.sepnet.ac.uk/sme-dtn/

University of Salford £3,640,829

North of England Robotics Innovation Centre (NERIC)

The aim of this project is to establish the University of Salford as the 'go-to' provider of Robotics / Al solutions for SMEs. It responds to the need for a focus on Al, data and robotics as key growth areas, with automation being a tool for regional industrial growth in Greater Manchester. It will seek to develop a resource of dedicated translational specialists "Intrepid Problem Solvers" (IPS) to work with SMEs to 'problem solve' live business issues as well enabling new novel research to be undertaken by existing researchers. The project will add wider benefits by creating an innovation ecosystem focused on the needs of SMEs. For more information, please visit: North of England Robotics Innovation Centre | University of Salford

University of Bath £4,987,157

Innovation Centre for Applied Sustainable Technologies (iCAST).

This will be a unique knowledge exchange facility that enables companies to easily invest in R&D and provide specialist business support for the innovation to be deployed commercially. The Centre will enable UK companies to partner with critical mass academic strength to enable them to scale-up, deliver economic impact, and build supply chains, jobs and growth in the UK. This project delivers on the whole innovation system recommendation of the UK Government's R&D Roadmap, as an integrator of key research assets in the chemical technologies ecosystem. It will be founded on the research of the universities of Bath and Oxford focussed on chemistry-using and chemical process-based innovation. Delivering Government and UKRI priorities in relation to Clean Growth, net zero, long-term economic prosperity and enhancing HEI-Business KE mechanisms, iCAST will accelerate innovation from proof of principle towards marketreadiness at speed with its ability and capability to reach back into Universities for deep academic problem solving.

https://www.csct.ac.uk/icast/