2024-25 Strategic Longer and larger (sLoLa) funding opportunity: Summary of BBSRC awards greater than £2 million (01 April 2024).

Link	Project Title	Project Lead Organisation	Initiative
BB/V011553/1	Perennial Biomass Crops for Greenhouse Gas Removal	Aberystwyth University	Greenhouse Gas Removal Demonstrators (GGR-SPF)
<u>Institute</u>	Resilient Crops	Aberystwyth	BBSRC Institute Strategic
<u>Programme</u>		University	Programme Grant
<u>Institute</u>	Immunology: Molecular & Cellular Mechanisms of Host Defence and Immunosenescence	Babraham	BBSRC Institute Strategic
<u>Programme</u>		Institute	Programme Grant
Institute	Signalling: Molecular mechanisms underpinning healthy ageing	Babraham	BBSRC Institute Strategic
Programme		Institute	Programme Grant
<u>Institute</u>	Epigenetics: Epigenetics and cellular heterogeneity in development and ageing	Babraham	BBSRC Institute Strategic
<u>Programme</u>		Institute	Programme Grant
BB/Y008332/1	Environmental Biotechnology Innovation Centre	Cranfield University	Engineering Biology Mission Hubs and Awards
BB/V003534/1	SUMOcode: deciphering how SUMOylation enables plants to adapt to their environment	Durham University	Longer and Larger Grants (LoLas)
<u>Institute</u>	Cellular Genomics (CELLGEN)	Earlham	BBSRC Institute Strategic
<u>Programme</u>		Institute	Programme Grant
Institute	Decoding Biodiversity (DECODE)	Earlham	BBSRC Institute Strategic
Programme		Institute	Programme Grant
BB/W018012/1	Pasture to Plate (P2P): realising the enormous potential of UK grasslands	Harper Adams University	Transforming the UK food system
Institute	Building Robustness in Crops	John Innes	BBSRC Institute Strategic
Programme		Centre	Programme Grant

<u>Institute</u>	Dolivoring Sustainable Wheat	John Innes	BBSRC Institute Strategic
<u>Programme</u>	Delivering Sustainable Wheat	Centre	Programme Grant
<u>Institute</u> <u>Programme</u>	Harnessing Biosynthesis for Sustainable Food and Health	John Innes Centre	BBSRC Institute Strategic Programme Grant
<u>Institute</u> <u>Programme</u>	Food Microbiome and Health	Quadram Institute Bioscience	BBSRC Institute Strategic Programme Grant
<u>Institute</u> <u>Programme</u>	Microbes and Food Safety	Quadram Institute Bioscience	BBSRC Institute Strategic Programme Grant
BB/Y00325X/1	Development of a Chemoproteomics Centre of Excellence: A Prosperity Partnership for Drug Discovery in Northern Ireland	Queen's University of Belfast	BBSRC Prosperity Partnerships
BB/T002182/1	What determines protein abundance in plants?	Rothamsted Research	Longer and Larger Grants (LoLas)
<u>Institute</u> <u>Programme</u>	Green Engineering - knowledge-based delivery of sustainable products in plants	Rothamsted Research	BBSRC Institute Strategic Programme Grant
<u>Institute</u> <u>Programme</u>	Growing Health - bio-inspired solutions for healthier agroecosystems	Rothamsted Research	BBSRC Institute Strategic Programme Grant
<u>Institute</u> <u>Programme</u>	Resilient Farming Futures	Rothamsted Research	BBSRC Institute Strategic Programme Grant
<u>Institute</u> <u>Programme</u>	Towards Clean, Green and Net-Zero Agriculture (AgZero+)	Rothamsted Research	BBSRC Institute Strategic Programme Grant
BB/S011269/1	GCRF One Health Poultry Hub	Royal Veterinary College	GCRF Interdisciplinary Research Hubs (GCRF IRH)
BB/Y008723/1	Land Use for Net Zero Hub	The James Hutton Institute	Land Use Net Zero (LUNZ)
<u>Institute</u>			BBSRC Institute Strategic

<u>Programme</u>	Host Responses to Viral Infection	The Pirbright Institute	Programme Grant
<u>Institute</u> <u>Programme</u>	Virus Life Cycles at Multiple Scales	The Pirbright Institute	BBSRC Institute Strategic Programme Grant
BB/T001984/1	Opportunities to modulate extracellular matrix secretion and assembly for long term health	The University of Manchester	Longer and Larger Grants (LoLas)
BB/X003027/1	Generalised Photocatalysis by Enzymes (GENPENZ)	The University of Manchester	Longer and Larger Grants (LoLas)
BB/Y003195/1	Rules of life in CO2-driven microbial communities: Microbiome engineering for a Net Zero future	The University of Manchester	Longer and Larger Grants (LoLas)
BB/Y003233/1	Melanin's impact on skin behaviour: Effects across the pigmentary spectrum.	The University of Manchester	BBSRC Prosperity Partnerships
BB/Y003276/1	SuCCEED: Sustainable Commodity Chemicals through Enzyme Engineering & Design	The University of Manchester	BBSRC Prosperity Partnerships
BB/V011561/1	Greenhouse Gas Removal by Accelerated Peat Formation	UK Centre for Ecology & Hydrology	Greenhouse Gas Removal Demonstrators (GGR-SPF)
BB/V003542/1	Origins of Biology: How energy flow structures metabolism and heredity at the origin of life	University College London	Longer and Larger Grants (LoLas)
BB/W003538/1	Rewriting The Genetic Code: The Algal Plastome As A Testbed For Basic And Applied Studies	University College London	Longer and Larger Grants (LoLas)
BB/Y003292/1	Decarbonising the Surfactant and Functional Polymer Value Chains by enzymatic processes	University College London	BBSRC Prosperity Partnerships
BB/V003518/1	Regulation of epithelial and endothelial cell-cell junctions by mechanical forces	University of Bristol	Longer and Larger Grants (LoLas)
BB/W003449/1	Creating and comprehending the circuitry of life: precise biomolecular design of multi-centre redox enzymes for a synthetic metabolism	University of Bristol	Longer and Larger Grants (LoLas)
BB/V004832/1	Transforming Urban Food Systems for Planetary and Population Health (The Mandala Consortium)	University of Cambridge	Transforming the UK food system

BB/X00306X/1	Novel Plastizymes: discovery and improvement of plastic-degrading enzymes by integrated cycles of computational and experimental approaches	University of Cambridge	Longer and Larger Grants (LoLas)
BB/Y003179/1	Deciphering Cellular Niches and Cross-talk in Human Heart Development (CellTalkHHD)	University of Cambridge	Longer and Larger Grants (LoLas)
BB/Y002997/1	BBSRC Institute Strategic Programme: Advancing Plant Health (APH) Partner Grant	University of East Anglia	BBSRC Institute Strategic Programme Partner Grant
BB/Y008545/1	Engineered Genetic Control Systems for Advanced Therapeutics	University of Edinburgh	Engineering Biology Mission Hubs and Awards
<u>Institute</u> <u>Programme</u>	Genes & Traits for Healthy Animals	University of Edinburgh	BBSRC Institute Strategic Programme Grant
<u>Institute</u> <u>Programme</u>	Prevention & Control of Infectious Diseases	University of Edinburgh	BBSRC Institute Strategic Programme Grant
BB/V011588/1	Greenhouse Gas Removal Plus (GGR+): Sustainable Treescapes Demonstrator & Decision Tools	University of Exeter	Greenhouse Gas Removal Demonstrators (GGR-SPF)
BB/X003051/1	Multi-layered bacterial genome defences: linking molecular mechanisms to bacteria-MGE conflicts in single cells, populations, and communities.	University of Exeter	Longer and Larger Grants (LoLas)
BB/Y008456/1	Engineering Biology Hub for environmental processing and recovery of metals; from contaminated land to industrial biotechnology in a circular economy	University of Kent	Engineering Biology Mission Hubs and Awards
BB/X003086/1	Unlocking the secrets of specialised ribosomes across eukaryotes	University of Leeds	Longer and Larger Grants (LoLas)
BB/T000627/1	How do RNA-binding proteins control splice site selection?	University of Leicester	Longer and Larger Grants (LoLas)
BB/V011596/1	Biochar Demonstrator Addressing Key Deployment Barriers for Carbon	University of Nottingham	Greenhouse Gas Removal Demonstrators

Sequestration

BB/Y00311X/1	GlycoWeb	University of Nottingham	Longer and Larger Grants (LoLas)
BB/Y008472/1	GlycoCell Engineering Biology Mission Hub: Transforming glycan biomanufacture for health	University of Nottingham	Engineering Biology Mission Hubs and Awards
BB/Y512333/1	PhenomUKRI The UK Plant and Crop Phenotyping Infrastructure	University of Nottingham	UK plant and crop phenotyping infrastructure (UKPCPI)
BB/W003392/1	Neuromodulatory-prefrontal interactions in primates	University of Oxford	Longer and Larger Grants (LoLas)
BB/W00349X/1	Single-molecule proteomics: next-generation analysis of proteins in individual cells	University of Oxford	Longer and Larger Grants (LoLas)
BB/Y007972/1	Preventing Plastic Pollution with Engineering Biology (P3EB) Mission Hub	University of Portsmouth	Engineering Biology Mission Hubs and Awards
BB/V004905/1	Co-production of healthy, sustainable food systems for disadvantaged communities	University of Reading	Transforming the UK food system
BB/W017946/1	'Raising the Pulse' (RtP): Systems analysis of the environmental, nutritional and health benefits of pulse-enhanced foods	University of Reading	Transforming the UK food system
BB/V004719/1	Healthy soil, Healthy food, Healthy people (H3)	University of Sheffield	Transforming the UK food system
BB/V011359/1	Greenhouse gas removal with UK agriculture via enhanced rock weathering	University of Sheffield	Greenhouse Gas Removal Demonstrators (GGR-SPF)
BB/Y012909/1	Co-Centre for SUstainable and REsilient FOOD systems (SUREFOOD-I)	University of Sheffield	SUstainable and REsilient FOOD systems (SUREFOOD-I)

BB/X002950/1	National Biofilms Innovation Centre	University of Southampton	National Biofilms Phase 2
BB/Y003268/1	A Prosperity Partnership for the Design of Next-Generation Antibody Drug Bioconjugates (Next-Gen ADC)	University of Strathclyde	BBSRC Prosperity Partnerships
BB/Y003187/1	Cell Wall Formation in Rod Shaped Bacteria	University of Warwick	Longer and Larger Grants (LoLas)
BB/V004581/1	Transformations to Regenerative Food Systems	University of York	Transforming the UK food system
BB/X003035/1	Understanding an ancient universal membrane effector system	University of York	Longer and Larger Grants (LoLas)

Project summaries are available on <u>Gateway to Research</u> for the majority of awards. Information about Institute Strategic Programmes is available <u>on the UKRI website</u>. The projects listed for Babraham Institute are supported by funding from BBSRC's previous Institute assement exercise in 2017.