

BBSRC INDUSTRIAL CASE STUDENTSHIPS 2015/2016

Lead Organisation	Awards	Grant Ref	Project Title	Collaborating organisation
Aberystwyth University	5	BB/M01505X/1	Endophytic bacteria: co-existence and chemical warfare	PhytoQuest Ltd
		BB/M016269/1	Improved establishment phase development and yield in the perennial bioenergy crop Miscanthus	Terravesta Ltd
		BB/M017389/1	Investigating the feasibility of a multi-conversion Miscanthus bioenergy crop	Drax Power Ltd
		BB/M016277/1	Pandas and parasites: A functional genomics approach to combat persistent Baylisascaris schroederi infection in captive giant pandas	Royal Zoological Society of Scotland (RZSS)
		BB/M015041/1	Viability and vitality in Saccharomyces cerevisiae: modelling for prediction of fermentation success from rapid measurements	Aber Instruments Ltd
Aston University	4	BB/M017311/1	The roles of the secretome, cell ageing and the wound microenvironment in the paracrine activity of canine mesenchymal cells	Veterinary Tissue Bank Limited (VTB)
		BB/M017087/1	Advanced adjuvants for antibody production	Mologic Ltd
		BB/M017044/1	Understanding the mechanistic uptake and exploring the translation of novel amino acid based ion pair complexes	Quest Healthcare Ltd
		BB/M016668/1	A tandem bio-chemo catalytic approach to the sustainable production of high performance coatings additives from glucose	Chemoxy International Ltd
Babraham Institute	1	BB/M017141/1	Revealing the hidden coding potential and dynamics of the mammalian transcriptome	Eagle Genomics
Cardiff University	1	BB/M014967/1	Developing innovative marker systems for garlic post-harvest quality assessment	Neem Biotech Ltd
Durham University	2	BB/M015645/1	Construction of 3D mucosal models to enhance the structure and function of epithelia	ECACC Culture Collections
		BB/M015653/1	Impact of longterm propagation in 3D culture on the phenotype of existing human cell lines	
Harper Adams University	2	BB/M016773/1	Weed management using low energy lasers, alone and in combination with low dose photosynthetic electron transport inhibitors	Syngenta
		BB/M015483/1	Improving biological control in UK organic vegetable growers	Horticultural Development Company
Imperial College London	1	BB/M016315/1	Controlling the quality of novel glycoprotein therapeutics	MedImmune
Institute of Cancer Research	1	BB/M016099/1	Modulation of the adaptive immune compartment by stromal fibroblasts	MedImmune

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John Innes Centre	3	BB/M016919/1	Eliminating Fusarium Head Blight susceptibility in wheat	RAGT Seeds Ltd
		BB/M015203/1	Strategies to improve nitrogen use in forage crops	BAGCD
		BB/M016609/1	Controlling Anti-Bacterial Action Spectrum with Sugars	Procarta Biosystems Ltd
King's College London	10	BB/M015211/1	Can salivary components predict subject responsiveness to tastes?	Diego
		BB/M016390/1	Advancing the UCOE-based gene expression platform for improved biomanufacturing and gene therapy applications	EMD millipore
		BB/M015033/1	Using chemical modification of a novel antimicrobial drug scaffold to reduce efflux from multidrug resistant Gram-negative ESKAPE pathogens	Public Health England
		BB/M014827/1	Understanding factors that influence ionisable xenobiotic bioaccumulation using a Fish In vitro Gill Cell culture System (FIGCS).	AstraZeneca
		BB/M015300/1	A Multiphoton microscopy approach for live-cell NF-kB signalling in macrophages using FLIM/FRET	Carl Zeiss Ltd
		BB/M014975/1	Investigating the microwave effects on tissue permeability using bioimaging	Mediwise
		BB/M015025/1	Accurate non-invasive quantification of myelin by quantitative magnetic resonance imaging	Pulse Teq Ltd
		BB/M014851/1	Development of hybrid structural-MS to determine the 3D structures of protein complexes	Waters Corporation (Micromass UK Ltd)
		BB/M015572/1	Evaluation and validation of a non-invasive (using fingerprints) drug screening device as a Point-of-Care tool the detection of illicit drugs	Intelligent fingerprinting Ltd
		BB/M014940/1	The distribution of mephedrone and its detection in alternative biological matrices	ALERE Toxicology
Lancaster University	3	BB/M016617/1	Reducing pesticide inputs and improving crop production under environmental stress by using seed treatments to prime plant defences.	Arid Agritec Ltd
		BB/M017109/1	Improving energy efficiency in protected cropping by exploiting plant responses to solar ultraviolet radiation	
		BB/M017354/1	Overcoming drought-induced limitation of legume yields by mediating plant hormone signalling	BI Biosciences
Newcastle University	1	BB/M016765/1	Chemical ecological protection of tomato by synergising plant priming and pest deterrence	Stockbridge Technology Centre
Northumbria University	1	BB/M016218/1	Development of novel biocatalytic processes for the manufacturing of food flavours and fragrances	Prozomix Ltd
Queen Mary, University of London	1	BB/M016625/1	Understanding regulation of lipid synthesis and signalling in the skin barrier	Stiefel

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Rothamsted Research	1	BB/M016420/1	An exploration of the evolutionary dynamics of non-target site herbicide resistance in <i>Alopecurus myosuroides</i>	Bayer CropScience AG
Royal Holloway, University of London	3	BB/M01651X/1	Gas plasma treatment as a novel seed technology to release dormancy and improve germination uniformity of vegetable seeds	Elsoms Seeds Ltd
		BB/M015718/1	Biochemical and molecular mechanisms associated with colour retention in fruit crops	Syngenta UK Ltd
		BB/M016005/1	Producing 'greener' high-value sports turf through soil microbial management	PlantWorks Ltd
Royal Veterinary College	1	BB/M017192/1	Focusing on the mitochondrial expression of TSPO as a marker and promoter of neuroinflammation	GE Healthcare
SRUC	1	BB/M016080/1	Strategic use of carbohydrase enzymes in broiler diets to increase productivity by improving gut health	AB Vista
The Genome Analysis Centre	1	BB/M017176/1	Reproducing published experiments in situ	eLife sciences publications ltd
The Pirbright Institute	4	BB/M017273/1	Epidemiological study of Foot-and-Mouth Disease Virus in East Africa and the development of simplistic molecular tools enabling detection and character	Enigma Diagnostics
		BB/M017303/1	Using a 'Vaccinomics' Approach to Characterise FMDV Evolution under Vaccine Selection	Merial
		BB/M016196/1	Behavioural and immunological control methods for <i>Culicoides</i> biting midges in the UK	APS Biocontrol Ltd
		BB/M016722/1	Mechanistic Constraints on the Acquisition of Variation by Alphaviruses	Dstl
The University of Manchester	6	BB/M017001/1	Keeping time: circadian clock responses to environmental challenge	Pfizer Global Research and Development
		BB/M016943/1	From Bug to Drug: A laboratory to Pharma discovery loop for direct sourcing of antifungal peptide aptamers	Blueberry Therapeutics Ltd
		BB/M016994/1	Understanding how the Arabidopsis plant peptide 'Kiss Of Death' (KOD) induces cell death in plant cells	Bayer CropSciences
		BB/M01696X/1	A cross-species study of the effects of agrochemicals on microtubule dynamics through the development of new live-imaging probes	Syngenta Ltd
		BB/M016986/1	Synthetic biology applications of P450 BM3	Agilent Technologies LDA UK Ltd
		BB/M016463/1	Improved Cryopreservation of Tissues for Biological Analysis	Asymptote Ltd

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University College London	1	BB/M015009/1	Computational Inference of Gene Function in Crop Genomes using Hierarchical Orthologous Groups	Bayer Crop Science NV
University of Aberdeen	3	BB/M016595/1	An integrated phage-display mammalian-expression system for the rapid production of recombinant antibodies	Scotia Biologics
		BB/M015440/1	The development of clinical diets for farmed fish gill diseases	Ewos Innovation
		BB/M016455/1	Characterization & exploitation of copy number variation in Atlantic salmon	Xelect Ltd
University of Bath	1	BB/M015912/1	Developing global engineering and synthetic biology tools for process optimisation with <i>Geobacillus</i> spp	BioSyntha Technology Ltd
University of Birmingham	5	BB/M015890/1	The metabolomic study of healthy ageing applying dried blood and urine spot collection	Thermo Fisher Scientific
		BB/M015084/1	Development and characterisation of cell active tool compounds to evaluate tyrosine phosphatase biology	Astrazeneca
		BB/M01584X/1	Real-time cell metabolism by NMR	Bruker UK Limited
		BB/M015882/1	Food security through insect dormancy management: using molecular physiology to optimise commercial rearing of a key UK pollinator	Biobest Laboratories Ltd
		BB/M016560/1	Process optimisation by understanding and controlling biofilm formation	Microbial Solutions Ltd
University of Bristol	2	BB/M016900/1	Circadian regulation of the responses of plants to herbicides	Syngenta
		BB/M017214/1	Modulation of stem cells and bacteria at titanium surfaces via nanotopography and peptides	The National Physical Laboratory
University of Cambridge	3	BB/M015416/1	Interdependent regulation between photosynthesis and circadian rhythms in cereals	Bayer Crop Science NV
		BB/M015432/1	Enzyme accessibility of xylan polysaccharides in plant cell wall biomass iCASE studentship	Novozymes A/S
		BB/M016692/1	Protein Engineering by Phenotypic Screening in Microfluidic Droplets	MedImmune Ltd
University of Dundee	6	BB/M016676/1	Omics-enabled detection and studies of phytophthora capsici disease in the field	Enza Zden
		BB/M01620X/1	The role of alpha3-GABAA receptors in mono-aminergic neuronal function	Eli Lilly and Company Ltd
		BB/M017079/1	Assessing the effects of ultrasound on intestinal epithelial permeability	Diagnostic Sonar Ltd - King's College London
		BB/M017362/1	Genomic selection for accelerated barley breeding	James Hutton Ltd
		BB/M016811/1	Unravelling the contribution of the cereal bacterial microbiota to rhizosheath formation and functioning	
		BB/M015734/1	Development of novel chromatographic workflows for deep-proteome analysis	ThermoFisher Scientific
University of East Anglia	2	BB/M015122/1	In vitro studies on a colonic delivery system with potential health benefits	Kuecept - Institute of Food Research IFR
		BB/M016358/1	Ubiquitination, Cell proliferation and differentiation, Transcription, Bioinformatic inspired organic synthesis	Charnwood Molecular Ltd

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University of Edinburgh	5	BB/M014819/1	Chicken intestinal organoids: a novel in vitro system to study mucosal vaccine targeting	Merck MSD Animal Health
		BB/M015777/1	Engineering bacterial hosts cells for robust growth at high external osmolarities	INEOS Group
		BB/M015149/1	Explaining allosteric modulation of protein function by energy/entropy localisation	UCB Celltech
		BB/M016412/1	Tissue Engineering an artificial Thymus	Nanopharma AS
		BB/M014894/1	Detecting and understanding mycobacterial infections in domestic cats and their role in the risk of zoonotic, intra- and inter-species spread	Biobest Laboratories Ltd
University of Essex	2	BB/M017125/1	Using spectral signatures as a toolbox for determining crop health status	Callen-Lenz Associates; Environment Systems Ltd
		BB/M01486X/1	Using synthetic biology to forward engineer naphthenic acid catabolic pathways in Pseudomonads for use as biotechnological tools in NA bioremediation	Oil Plus Ltd OPL; Consejo Superior de Investigaciones Cientifica CIB CISC
University of Exeter	4	BB/M016404/1	Defining the O-antigen biosynthetic pathways in zoonotic Coxiella burnetii	Defence Science & Technology Laboratory DSTL
		BB/M016382/1	Crop pest and pathogen risks to UK agriculture from international trade	The Food and Environment Research Agency (FERA)
		BB/M017036/1	Identification and exploitation of alkane biosynthetic pathways from Ascocoryne sarcoides	BioSyntha Technology Limited
		BB/M015874/1	Targeting superspreader farms for bovine tuberculosis control	Animals Health & Veterinary Laboratories Agency
University of Kent	6	BB/M017060/1	Generation of systems for the synthesis of recombinant proteins for use in rapid point of care diagnostics for inflammatory and other diseases	Mologic Ltd
		BB/M015785/1	Developing yeast single cell microinjection technology for the study of protein aggregate toxicity	Singer Instruments
		BB/M016013/1	Development of predictive tools and formulations for improved stability and delivery of novel peptide and recombinant protein format biotherapeutics	MedImmune
		BB/M016048/1	Tuning Clostridium for Biofuel Production	Green Biologics Ltd
		BB/M015130/1	Development of a system for simultaneous multiplane image acquisition for live cell imaging applications	Cairn Research Ltd
		BB/M01603X/1	Developing a label-free single molecule imaging technology: transitioning from material science to biological science	Danish Fundamental Metrology DFM

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University of Leicester	4	BB/M016706/1	Next-generation sequencing approaches to short-tandem repeat sequence variation	Key Forensic Services Ltd
		BB/M014908/1	Investigating the role of the meiotic chromosome axes in mediating crossover designation in bread wheat	KWS
		BB/M017397/1	Development of molecular imprinting with liquid chromatography- mass spectrometry HD-SRM for the sensitive and selective detection of proteins	Waters MS Technologies
		BB/M016501/1	Role of presynaptic Kv3 potassium channel subunits in forming native potassium channels and adapting synaptic transmission and auditory processing	Pharma
University of Liverpool	1	BB/M016528/1	Genomics for optimal aphid biocontrol	Mylnefield Research Services Limited
University of Nottingham	3	BB/M016374/1	Theoretical and experimental evaluations of the impact of hemodynamic flow (hydrostatic pressure) on hepatic clearance	Vertex Pharmaceuticals Ltd
		BB/M017370/1	Integration of an in vitro renal cellular set of tools with systems biology modelling to predict the renal contribution to drug pharmacokinetics	
		BB/M017257/1	Novel mechanisms in pain processing - involvement of alternative RNA splicing	Exonate Ltd
University of Oxford	6	BB/M015165/1	Using SP1 to control plastid development and yield in cereals	Plant Biosciences Limited (PBL)
		BB/M015157/1	Molecular tools to understand the role of bromodomains in the parasite <i>Trypanosoma cruzi</i>	GlaxoSmithKline
		BB/M017095/1	Enzyme beads for controlled alcohol oxidations in chemical synthesis	Johnson Matthey Plc
		BB/M016684/1	Next Generation Aptamers	ATDBio Ltd; DSTL Porton Down
		BB/M017338/1	Improving transport and storage of viable mesenchymal stem cells through investigations into their energy metabolism	Oxford MESTar Ltd
		BB/M016757/1	Functional Imaging to Investigate the Action of Anesthetic on Consciousness	Imanova Limited
University of Reading	4	BB/M016161/1	Beneficial mites for bumblebee colonies	Certis Europe BV; Uni of Sussex;
		BB/M014878/1	Transcriptome based approach to identify biomimetics for stem cell derived factors regulating tissue regeneration	KCL; Natural Biosciences SA
		BB/M016579/1	Linking biochemistry and genetics in celery to taste and flavour perceived by consumers: developing a more acceptable product	AL Tozer Ltd
		BB/M017222/1	Defining the role of Death Associated Protein Kinase 1 in cell fate using genomic and proteomic analysis	BC Platforms
University of Sheffield	2	BB/M016927/1	Characterising a novel breeding target for improved wheat leaves	RAGT Seeds Ltd
		BB/M01570X/1	Engineering improved specificity and activity into oral bacterial glycosidases for glycan biotechnology applications	Ludger Ltd
University of Southampton	1	BB/M014932/1	A novel in-vitro model for the perivascular drainage pathways of the brain	Kirkstall Ltd

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University of Strathclyde	1	BB/M016366/1	Establishing an integrated biocatalytic Friedel-Crafts platform for the alkylation of aromatic small molecules	GlaxoSmithKline
University of Sussex	3	BB/M017265/1	Developing novel pharmacological probes to understand the function of inositol monophosphatase	Janssen Pharmaceutical
		BB/M01715X/1	Developing novel tools to probe the function of GPR37 within the CNS	Janssen Pharmaceutical
		BB/M015386/1	Pollinator protection: improving the health of commercially produced bumblebees to enhance pollination services and reduce the pathogen spillover risk	Biobest Biological Systems
University of Warwick	3	BB/M017281/1	What really causes footrot in sheep: a cohort study of the microbial diversity of <i>Dichelobacter nodosus</i> in sickness and health	EBLEX
		BB/M016447/1	Exploiting new sources of broad-spectrum resistance to Turnip mosaic virus in brassicas	Sakata UK Ltd
		BB/M017206/1	Broadening and improving the Turnip yellows virus resistance base in oilseed rape (BITYR)	Limagrain UK Ltd
University of York	4	BB/M014916/1	Advanced biofuels and bioenergy from municipal solid waste	Wilson Steam Storage Ltd
		BB/M016331/1	An improved synthetic biology toolbox for developing <i>Clostridium</i> sp as hosts for biobutanol and commodity chemical production	Green Biologics Ltd
		BB/M015793/1	Water-use adaptation through the barley circadian clock	Stockbridge Technology Centre
		BB/M015831/1	Establishing methods to utilise difficult-to-digest feedstocks for anaerobic digestion	Clearfleau Ltd
Total	125			