

## Innovation Fund Programme

Competition	Partners	Title	Funding awarded	Status
Scottish EDGE R21	Tuggs	N/A	£35,000	Running
Scottish EDGE R20	EcoCascade	N/A	£35,000	Running
Innovation Fund	ScotBio/University of Edinburgh/Robert Gordon University	Valorisation of spent media from algal biomass production	£99,785	Running
Scottish EDGE R19	Lentitek Ltd	N/A	£35,000	Complete
Innovation Fund	EcoClean/University of St Andrews	Fish2Surf: Fish oil waste a source to produce biobased surfactants	£99,992	Complete
Innovation Fund	Marine Biopolymers/University of Glasgow	Sustainable Seaweed Polymers for Next Generation Lithium Ion Batteries (LIBs)	£99,711	Complete
Innovation Fund	Fujifilm Diosynth Biotechnologies	Bespoke proteases for downstream processing of Biopharmaceuticals	£99,729	Complete
Innovation Fund	Hyaltech	Novel Approaches for Producing High Molecular Weight Hyaluronic Acid	£81,827	Running
RSE	University of Strathclyde	Stuart Hannah	£76,983	<a href="#">Case study</a>
RSE	Univesity of St Andrews	Sunil Sharma	£51,454	Complete
Scottish EDGE R17	Dyneval	N/A	£50,000	Complete
Scottish EDGE R17	Whaterwhelm	N/A	£25,000	Complete
Scottish EDGE R16	Mi:RNA	N/A	£20,000	Complete
Scottish EDGE R16	OGI:Bio	N/A	£20,000	Complete
Scottish EDGE R16	TenBio	N/A	£37,500	Complete
Innovation Fund	Roslin Technologies/University of Edinburgh	Partnering for the commercial scale-up of porcine induced pluripotent stem cell lines for development of novel cultured meat products	£73,470	<a href="#">Case study</a>
Innovation Fund	NuCana Plc/University of St Andrews	Biocatalytic routes to generate cancer chemotherapy pharmacokinetic tools	£100,000	Running
Innovation fund HVB	Agroceutical Products Ltd/Robert Gordon University	Bioactivity of Compounds Derived from Amaryllidaceae (Daffodil)	£39,959	<a href="#">Case study</a>

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Innovation fund	Green Bioactives/University of Edinburgh	Improved paclitaxel yields in a biomanufacturing platform	£99,926	<a href="#">Case study</a>
Innovation fund	BAM Richies/University of Strathclyde	Optimising bacteria production and storage for field-scale application of a new biomineralization technology in ground engineering	£100,000	<a href="#">Case study</a>
Innovation fund	Ingenza/University of Edinburgh	Proving the utility of a stably replicating neo-chromosome for engineering pathways in Pichia pastoris	£85,199	Complete
Innovation fund	NuCana Plc/University of St Andrews	Biocatalysis to generate next generation Protides	£100,000	Complete
Innovation fund AlgaeUK	ScotBio/University of Edinburgh	Production scale up of a thermotolerant C-phycoyanin from a mesophilic cyanobacterial bio-platform	£39,940	<a href="#">Case study</a>
Innovation fund AlgaeUK	Xanthella/Scottish Association for Marine Science (SAMS)	A novel technology for stress-free, light-induced synthesis of carotenoid pigments in microalgae	£18,601	Complete
Bioeconomy Boost	Marine Biopolymers/Unilever/Napier University	Development of home and personal care products utilising seaweed nanocellulose	£24,828	Complete
Bioeconomy Boost	P-BLOCK/University of Edinburgh	Biological recovery of Rare Earth Elements	£23,785	<a href="#">Case study</a>
Bioeconomy Prime	CelluComp/James Hutton Institute	Antimicrobial nanocellulosic matrices and coatings	£50,000	<a href="#">Case study</a>
Bioeconomy Prime	The Antibody Company/University of Strathclyde	Development of Lateral Flow Diagnostic model for contaminant identification in brewing	£50,000	<a href="#">Case study</a>
Bioeconomy Prime	Recircle/University of Edinburgh	Development and testing of 3D printed bioreactors for deep desulphurisation of fuel oils	£49,990	<a href="#">Case study</a>
IB Prime	ScotBio/University of Edinburgh	3D-AEX: a novel 3D printed chromatography column for improving the extraction and purification of C-phycoyanin	£49,981	<a href="#">Case study</a>
IB Prime	AskBio/University of Edinburgh	CNS-specific promoters for gene therapy applications	£49,197	Complete
IB Prime	Celtic Renewables/Napier University	Isolation and Characterisation of Solventogenic Clostridial Strains from Renewable Sustainable Substrates	£50,000	<a href="#">Case study</a>
IB Prime	ENOUGH/University of Strathclyde	Accelerating scale up of the ABUNDA® bioprocess	£42,380	<a href="#">Case study</a>

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IB Prime	CelluComp/University of Edinburgh/University of Glasgow	Validating a potential ethanol toxicity reducing additive from vegetable waste	£48,850	Cancelled
IB Prime	Ingenza/University of Edinburgh	Using a new-chromosome for synthetic biology in Pichia pastoris	£49,831	<a href="#">Case study</a>
IB Prime	Marine Biopolymers/Heriot Watt University	Extraction of Nitrogenous Material from Seaweed	£47,126	<a href="#">Case study</a>
IL - Joint IC	BAM Ritchies/University of Strathclyde/CSIC	Bacteria-based Ground Improvement Technology	£5,000	Complete
Bioeconomy Accelerator	Ingenza/University of Dundee	Negative Carbon in biobased substrate conversions into sustainably produced chemicals	N/A - funded by ZWS	Complete
Bioeconomy Accelerator	Marine Biopolymers/James Hutton Institute	High quality cellulose from seaweed process residue	N/A - funded by ZWS	Complete
Bioeconomy Accelerator	Xanthella/University of Strathclyde	ENBIO	N/A - funded by ZWS	Complete
Bioeconomy Accelerator	Pennotec/Heriot Watt University	Re-use of crustacean shell	£7,000 - cofunded by ZWS	Complete
Micro-accelerator	Horizon Proteins/Heriot Watt University	Sustainable Products: Innovation, Recovery and Integrated Technology (SPIRIT)	£53,333	<a href="#">Case study</a>
Micro-accelerator	Marine Biopolymers/University of Glasgow/The James Hutton Institute/Bangor University	Extraction and commercialisation pathways for Laminaria hyperborea bark	£119,553	<a href="#">Case study</a>
Micro-accelerator	3F BIO/University of Strathclyde	3F BIO - Global Feedstock	£90,000	<a href="#">Case study</a>
Micro Accelerator	ILC Therapeutics/University of Edinburgh	Bespoke affinity-matrices for purification of next generation immune modulating synthetic biologics	£138,484	<a href="#">Case study</a>
Micro Accelerator	Carbogenics/University of Edinburgh	Smart carbon additive CreChar® to support bioprocesses	£70,833	<a href="#">Case study</a>

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Micro Accelerator	ScotBio/University of Edinburgh	Developing a scalable downstream process for extraction and purification of the high value cyanobacterial pigment protein C-phycoyanin.	£169,673	<a href="#">Case study</a>
Leading Member	GSK/University of Edinburgh	Laser Enabled Analysis and Processing of Penicillium chrysogenum	£23,310	Complete
Impact Accelerator	Ingenza/University of Edinburgh	A platform for rapid, scalable production of glycoproteins for use as biotherapeutics	£87,230	<a href="#">Case study</a>
Impact Accelerator	Celtic Renewables/University of Glasgow	Application of omics technology to improve the industrial ABE fermentation from novel sustainable feedstocks	£100,000	<a href="#">Case study</a>
Impact Accelerator	GSK/University of Edinburgh	Penicillium performance enhancement	£100,000	Complete
Impact Accelerator	The Antibody Company/University of Strathclyde	Production of lateral flow diagnostic kits using gold nanoparticle adsorption to antibodies	£54,442	<a href="#">Case study</a>
SynBio Accelerator	Ingenza/University of Glasgow	RTMet: Real Time Metabolomics for Synthetic Biology Applications	£199,102	<a href="#">Case study</a>
SynBio Accelerator	Unilever/University of Edinburgh	Accelerating biotech production of saponins	£200,394	<a href="#">Case study</a>
SynBio Accelerator	Lucite/Ingenza/St Andrews	Maximising the metabolic efficiency of cellular methacrylate production	£194,063	<a href="#">Case study</a>
SynBio Accelerator	Nissan/University of Glasgow	Engineering microbial cell factories for industrial carotenoids biosynthesis	£199,219	Complete
SynBio Accelerator	AskBio/University of Edinburgh	Engineering Tissue-Specific Synthetic Promoters (TSSP) Utilising a Novel High Content Enhancerome In Vivo Screen	£196,479	<a href="#">Case study</a>
SynBio Accelerator	Twist/University of Edinburgh	Accelerating industrial metabolic engineering using YeastFAB	£199,892	Complete
Core	Ingenza/Edinburgh Napier University	Fermentation of waste derived sugars to produce butanol, ethanol, succinic acid and/or protein	£109,250	Complete
IB Accelerator	CelluComp/James Hutton Institute	New bioinspired 3d nanoplatfoms for green biocatalysis	£171,413	Complete
IB Accelerator	Ingenza/University of Strathclyde	Cellular Methacrylate Transporter	£156,875	<a href="#">Case study</a>

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IB Accelerator	Ingenza/University of Edinburgh	Engineering a Novel Industrial Bio-transformation Pathway for Surfactant Manufacture	£98,665	<a href="#">Case study</a>
Exemplar	3f bio ltd/University of Strathclyde	3f Diversity	£95,887	<a href="#">Case study</a>
Exemplar	AskBio (Synpromics)/University of Edinburgh	Design of inducible promoters for improved bioprocessing in mammalian cell systems	£29,703	<a href="#">Case study</a>
Exemplar	Art Photonics/University of Edinburgh	Real-time control of bioreactors with in-situ spectroscopy	£99,620	Complete
Exemplar	Horizon Proteins/Heriot Watt University	New World by-products	£99,904	<a href="#">Case study</a>
Exemplar	Xanthella/University of St Andrews	Photodynamic enhancement of industrial feedstock production by microalgae through solar wavelength conversion	£72,184	Complete
Exemplar	Ingenza/University of St Andrews	Development of novel enzymes for methacrylate biomanufacturing	£91,427	Complete
Exemplar	Ingenza/University of Edinburgh	Bioengineering with CRISPR-Cas to deliver non-GM yeast for industrial and agricultural applications	£98,282	Complete
Exemplar	GlycoMar Ltd/University of Edinburgh	Development of scalable purification of functional oligosaccharides	£139,606	<a href="#">Case study</a>
Exemplar	Ingenza/University of Aberdeen	Optimising biotechnological protein expression through predictive management of cellular translation	£112,870	<a href="#">Case study</a>
Exemplar	Ingenza/University of Aberdeen	An in vivo route to anti-HIV cyclotides	£142,189	Complete
Exemplar	Ingenza/University of Strathclyde	Comparative transcriptomic and metabolomic analysis of engineered bacteria for the production of monomers using Industrial Biotechnology	£128,807	Complete
Exemplar	GSK/University of Edinburgh	A synthetic metabolon for D-hydroxy phenylglycine methyl ester production	£131,056	Complete
Exemplar	Glycomar/University of Edinburgh/Heriot Watt University	Development of scalable purification of functional oligosaccharides	£139,606	<a href="#">Case study</a>

## Feasibility Programme

Year	Partners	Title	Funding awarded	Status
Flexible Fund 2023	EcoClean/University of Edinburgh	Advancement of a biosurfactant extracted from fish low value by-products: a circular approach in aquaculture	£9,992	Running
Feasibility 2023	ScotBio/Queen Margaret University	Characterisation of a novel algal protein product for application as a functional ingredient	£22,467	Running
Feasibility 2023	Intelligent Growth Solutions/Cambond/SRUC	Sustainable Manufacturing of Low Carbon Vertical Farms From Bioresin for a Circular Bioeconomy	£23,820	Awarded
Feasibility 2023	Grampian Growers/Robert Gordon University	Valorisation of co-products from the potato growing industry	£29,993	Running
Feasibility 2023	Bio-Sep Ltd/University of Glasgow	Improving the sustainability of resins and films with natural lignin derived from biomass residues	£30,000	Awarded
Feasibility 2023	Scottish Water Horizons/AL-2 Teknik UK/University of Highlands and Islands	Conversion of sewage sludge into biochar: Wastewater treatment potential and re-use on land	£29,983	Running
Spinout 2022	University of Glasgow	Casdu Crop Solutions	£8,000	Running
Feasibility 2022	CuanTec/Abertay University	Antimicrobial Efficacy of CuanTec's Technology	£19,263	Running
Feasibility 2022	Mara Seaweed/University of Strathclyde	Fermentation of Scottish Seaweeds for Food Application	£19,964	Running
Feasibility 2022	New Wave Foods/Cambond/SRUC	Development of high-value bio-products from wild-harvested and farmed Scottish seaweed	£20,000	Complete
Feasibility 2022	SEM/University of Edinburgh	Recycling and remediation of metal from advanced alloy waste.	£20,000	Running
Feasibility 2022	Trax Technology/Robert Gordon University	From plants to energy storage devices	£16,812	Cancelled
Spinout 2022	University of Edinburgh	Nanosensr	£18,888	Complete
Feasibility 2022	Ingenza/Heriot Watt University	Viable production of fully eco-compatible bio-surfactants for use in "Marine-Safe" shampoo	£19,927	Awarded
Feasibility 2022	Cesscon Decom Ltd/Abertay University	Characterisation and extraction of valuable components from marine growth	£19,888	Running

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Feasibility 2022	Impact Solutions/University of Edinburgh	Microbial Synthesis of L-DOPA from waste PET	£19,927	Complete
Feasibility 2022	Zenith AI NI Ltd/University of St Andrews	Robust enzyme engineering using artificial intelligence	£19,860	Running
Feasibility 2022	Artisan Roast/Evergreen Energy Recovery Systems Limited/University of St Andrews	Coffee to Energy coffee waste source for bioenergy productions	£19,974	<a href="#">Case study</a>
Feasibility 2022	Ingenza/University of Edinburgh	Data-driven Optimisation of Protein Production for Industrial Biotechnology	£14,800	Running
SULSA/CENSIS	MicroplateDx/University of Strathclyde	Portable and rapid antimicrobial susceptibility testing based on organic bioelectronics	£5,000	Running
Feasibility 2021	Scottish Association for Marine Science	Accelerating growth of the seaweed industries in Scotland	£17,675	Complete
Feasibility 2021	Prickly Thistle Scotland Ltd/James Johnston and Co of Elgin/University of Edinburgh	Kerecycle – a programme of biocatalyst-driven valorisation of Scottish wool	£13,943	<a href="#">Case study</a>
Spinout 2021	University of Dundee	RHAPSEDA	£20,000	Running
SULSA	Betabugs	Seeding pan-genome of the protein saviour: black soldier fly	£10,000	Running
SULSA	High Force Research/University of	Development of novel isobaric labels for quantitative mass spectrometry-based proteomics	£5,000	Complete
Feasibility 2021	Biosimetrics/Scottish Association for Marine Science (SAMS)	A Feed of the Future: Optimising phytoplankton cultivation, composition, and digestibility	£19,997	Complete
Feasibility 2021	CuanTec/University of Highlands and Islands	Determination of crustacean allergens in purified chitosan through interlaboratory assessment	£19,408	<a href="#">Case study</a>
Feasibility 2021	Victrex/University of Edinburgh	Microbial production of hydroquinone from waste feedstocks	£18,168	<a href="#">Case study</a>
Feasibility 2021	Cellucomp/University of Edinburgh	A novel plant enzyme for enhancing the viscosity or hydrophobicity of cellulosic materials	£19,560	<a href="#">Case study</a>
Feasibility 2021	The Antibody Company/University of Edinburgh	Selection and characterisation of anti-peptide synthetic antibodies for comparison with conventional reagents	£19,747	<a href="#">Case study</a>

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Feasibility 2021	Celtic Renewables/Edinburgh Napier University	Evaluation of Clostridium Co-Culture Fermentations with Sustainable Feedstocks	£15,725	<a href="#">Case study</a>
Feasibility 2021	Cuantec/James Hutton Institute	Feasibility of CuanTec's Commercial Chitosan Conversion	£19,253	<a href="#">Case study</a>
Feasibility 2021	Cuantec/James Hutton Institute	Feasibility of CuanTec's Process By-products as Sources of Added Value	£19,999	<a href="#">Case study</a>
Feasibility 2021	Cellexus International/University of Abertay	Development of application for a Single-Use Airlift Bioreactor to produce recombinant monoclonal antibodies (mABs) in Chinese Hamster Ovary cell line at an industrial scale	£15,988	<a href="#">Case study</a>
Feasibility 2021	Impact Solutions/University of Edinburgh	Evaluation of Fish Waste as a Novel Feedstock for the Bio-production of Adipic Acid in Escherichia coli	£16,797	<a href="#">Case study</a>
Feasibility 2021	Fujifilm Diosynth Biotechnologies/University of Edinburgh	New strategies for downstream processing of recombinant proteins	£19,971	<a href="#">Case study</a>
Feasibility 2021	ScotBio/University of Edinburgh/Robert Gordon University	Producing broad spectrum antiviral therapeutics from cyanobacteria	£16,600	<a href="#">Case study</a>
Feasibility 2020	OGI/University of Edinburgh	Extending the analytical capability of affordable microbioreactors	£14,936	<a href="#">Case study</a>
Feasibility 2020	Recircle/University of Edinburgh	3D printed polystyrene bioreactors for biosurfactant production	£14,996	Cancelled
Feasibility 2020	SEM/University of Edinburgh	WEEE- metal recovery and biological remediation of effluents	£14,998	<a href="#">Case study</a>
Feasibility 2020	Revive Eco/James Hutton Institute	Sustainable Substrate	£14,290	<a href="#">Case study</a>
Feasibility 2020	Abbey Ecosse/University of Highlands and Islands	Feasibility of decarbonisation of energy networks from flexible energy from AD of distillery co-products – investigating the environmental metrics at the Ecosse North Coast Energy Network (ENCEN)	£14,632	<a href="#">Case study</a>
Feasibility 2020	Carbogenics/University of Edinburgh	Novel process for efficient bio-methanisation of waste-derived syngas	£15,000	<a href="#">Case study</a>
Feasibility 2020	ENOUGH/University of Strathclyde	Analytical techniques for fungal morphology and nutrient feed composition in a food application	£14,800	<a href="#">Case study</a>



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Feasibility 2020	NZC2030/University of the West of Scotland	Manufacture of Mycelium Construction Products from Waste Material	£9,117	<a href="#">Case study</a>
Feasibility 2020	Eco Clean/University of St Andrews	Fish oil waste source for the production of bio based surfactants	£7,500	<a href="#">Case study</a>
Spinout	University of Edinburgh	Enamel matrix protein formulation for tooth repair	£8,640	<a href="#">Case study</a>
Feasibility 2020	Strathendrick Biogas/Robert Gordon University	A Feasibility Study on an Anaerobic Digester (AD) Plant Installation in Orkney	£14,771	<a href="#">Case study</a>
Spinout	University of St Andrews	Enzymatic X-Factories	£15,000	<a href="#">Case study</a>
Feasibility 2020	Argent Energy/University of Edinburgh	HVC from Waste Fats, Oils and Greases using Enzymatic Routes	£14,937	<a href="#">Case study</a>
Feasibility 2019	Intelligest/Heriot Watt University	Automated/Modular Bio-upcycler	£14,870	<a href="#">Case study</a>
Feasibility 2019	MiAlgae/University of Highlands and Islands	Optimisation of a Commercial Algal Strain for Use in Pet Food and Aquaculture Feed Production	£14,773	<a href="#">Case study</a>
Feasibility 2019	Scottish Leather Group/Horizon Proteins/Heriot Watt University	Collagen - "Protein Factory" – Phase 1	£15,000	<a href="#">Case study</a>
Feasibility 2018	Cellucomp/University of Glasgow	Cellucomp Market Research	£0	Complete
Feasibility 2018	Marine Biopolymers Ltd/University of Glasgow	MBL Market Research	£0	Complete
Feasibility 2017	Scottish Forestry	Concept Biorefinery Demonstration Facility	£15,400	Complete
Feasibility 2017	Heriot Watt University	OGIC IBioIC Joint Programme Phase 1- Feasibility study	£15,876	Complete
Feasibility 2016	Ricardo Energy & Environment	Mapping Resources for Biorefining in Scotland (Waste) Biorefinery Model	£5,464	Complete