

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Ilika Technologies Ltd GSK Bioelectronics	High density solid-state battery technology for miniature medical implants	£1,493,160	£695,212
Project description - provided by applicants			
<p>This project will develop a solid-state implantable miniaturised battery to power an Implantable Pulse Generator (IPG). IPG's treat conditions by using the bodies nervous system to send circuits of neurons through electric impulses to the end organ in order to control the body, repair lost function and restore health. Two features make these circuits excellent targets for therapeutic intervention. First, they comprise discrete components " interconnected cells, fibre tracts and nerve bundles " allowing for pinpoint intervention. Second, they are controlled by patterns of action potentials, which can be altered for treatment. Already, devices that harness electrical impulses are used to treat disease. A new breed of IPG device is being developed which offers a more targeted approach - a device that can read the body's electrical impulses and can identify when there is a problem and then make the appropriate correction. These micro devices will be small enough to attach to nerve endings. Ilika will build upon its lithium-ion battery technology to create a battery with small enough footprint to be encapsulated within the IPG device yet still have enough battery power and circuitry to run algorithms that generate the patterns of electrical impulses needed to treat various diseases.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Autifony Therapeutics Ltd	Development of a Kv3.4 modulator for the treatment of dementia	£1,277,979	£894,585
Project description - provided by applicants			
<p>Alzheimer's disease affects 1% of the world's population. Given the ageing population, 115 million people are expected to suffer from the disease by 2050. The impact on the lives of patients, their families and society in general is huge. In the UK, there are estimated to be over 670,000 people acting as primary, unpaid carers for people with dementia. Despite decades of research and the discovery of genes that increase the risk of AD, drugs that can slow or halt the progression of the disease have yet to arrive. Drugs which provide some symptomatic improvement are available, but have limited efficacy and do nothing to prevent the patient's decline. There is an urgent need to cast the net wide in the search for better treatments. Autofony have pioneered the discovery of drugs that target Kv3 ion channels in the brain. In collaboration with Prof Kaczmarek (Yale) and Prof Covarrubias (Jefferson), we have identified the Kv3.4 channel as an exciting new target for drugs that may treat both the symptoms of AD, but also slow the course of the disorder. Together with Dr Livesey (Cambridge), our consortium will investigate the role of Kv3.4 channels in AD and develop novel compounds that selectively target this channel, with the potential to identify a more effective treatment for this devastating illness.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Cambimune Ltd	Development of a novel therapy against C difficile	£422,440	£295,708
Project description - provided by applicants			
<p>In light of rapidly emerging bacterial resistance to antibiotics, novel antimicrobials that are more refractory to resistance development are urgently needed. C. difficile infections (CDI) driven by the emergence of highly virulent and antibiotic resistant strains have, over the last two decades, become more severe and more difficult to treat. They are now one of the most frequent hospital-acquired infections in many industrialised countries. Hospital-acquired infections caused by C. difficile cost healthcare systems \$3.2 billion in the US, \$4.4 billion in the EU and an estimated \$10 billion, globally, each year. The vast majority of C. difficile cases occur in the elderly following broad spectrum antibiotic use in a hospital or other health care settings. This project will further develop our novel C. difficile therapy that deploys potent and highly-specific novel biological enzymes that kill the bacterium in a highly targeted fashion. Our highly specific approach will not disrupt the normal gut flora and should significantly reduce relapse rates currently experienced with antibiotics. Pioneering an early intervention approach in at risk patients (preventing acute CDI) would save lives, reduce morbidity and reduce hospitalisations required to treat the disease.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
JRI Orthopaedics Ltd Spheritech Ltd University of Cambridge	ADROIT – Arthroscopically-Deliverable Regenerative Osteochondral Implant Technology	£780,956	£545,357
Project description - provided by applicants			
<p>Osteoarthritis (OA) the disease that this project targets, imposes massive burden on society not only in terms of loss of quality of life for the individual, but also in terms of costs directly to the Health Services for their treatment and indirectly from loss of earnings and impact on their carers: and it is getting worse. Despite this, treatment is often only for symptoms such as pain until the disease has progressed far enough to warrant joint replacement surgery. There are some exciting new approaches to the early stages of this disease, in which the joint surface is regenerated and not replaced. However, today these require a surgical procedure in which the joint is fully opened. In this project the three partners (two SMEs: JRI and Spheritech, and University of Cambridge) will for the first time ever develop a biomaterial that can be implanted using 'keyhole' (arthroscopy) or open surgery, specifically to regrow the joint surface in the early-stages OA. The biomaterial, Proliferate® has been used successfully to regenerate many tissues already including, skin, liver and nerves. This project will give all the evidence needed to take it into the clinic, get a CE mark and start treating patients with OA early before total joint replacement is their only option.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award
Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Orthonika Ltd	Innovative Textile Reinforced Anatomical Total Meniscus Replacement for the Knee Joint	£372,985	£261,090
Project description - provided by applicants			
<p>Given the critical role the menisci play in the knee joint in terms of load transmission and joint stability, Meniscus injury is the most frequent orthopaedic surgical intervention with meniscus -related operations accounting for up to 50% of all knee surgeries. Despite this prevalence, for severely damaged menisci today's standard of care is still partial or total meniscectomy with extremely limited treatment options. Removal of the meniscus is a surgical procedure that is now well understood to be a major risk factor for osteoarthritis (OA) a chronic and debilitating condition that effects more than 4 million people in the UK , with an estimated 50% of partial meniscectomy patients being diagnosed with OA as a result. Orthonika, with support through the BMC programme, aim to address this healthcare challenge with the development of the first synthetic total replacement meniscus that accurately mimics the natural structure of meniscal tissue replicating the 'structure-function' of the natural meniscus to provide a durable implant that can be implanted with minimal invasion and fixed securely to the bone to withstand the rigour of physical activity - an option not currently available to patients with severe meniscus injury. The solution fulfils a clinical care gap between current palliative care practices and total knee replacement, restoring function and preventing the onset of OA.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Arecor Ltd	Liquid Glucagon: Improving Utilisation for Emergency Treatment of Severe Hypoglycaemia	£1,499,195	£1,049,438
Project description - provided by applicants			
<p>Arecor is a world leader in developing stable formulations of therapeutics, with in-house development programmes aimed at differentiated product concepts in diabetes. Arecor has solid plans for developing those product concepts to Phase I clinical proof-of-concept and subsequent licensing of the assets. One of the product concepts is liquid glucagon, both for emergency use and as a critical component for a bihormonal pump. Arecor has developed prototype liquid formulations of glucagon showing sufficient stability for a viable commercial product. With the critical support from InnovateUK, Arecor is progressing this asset through pre-clinical development by performing further optimisation to ensure compatibility with a selected delivery device, toxicology studies, formal stability studies and validated pharmacokinetic studies. Following this study, Arecor will be ready to move into Phase I human trial. Stable liquid glucagon product will transform the way glucagon is used for emergency treatment of severe hypoglycaemia episodes by removing the need for a complex reconstitution of the currently marketed lyophilised products. In addition, there is a recognised need for liquid glucagon as a critical component of bihormonal pumps that will also be addressed by this product.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award
Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
3D Engineering Design Ltd	An innovative inhaler for improved asthma management	£410,567	£287,396
Project description - provided by applicants			
<p>An estimated 5.4 million people across the UK have asthma. Non-compliance with inhaled corticosteroid (ICS) treatment regimens is believed to contribute to over 61% of deaths from asthma. 3D Design Engineering Ltd plan to develop an innovative inhaler to aid patient compliance with their prescribed ICS drug regime. The impacts of enabling greater compliance with ICS treatments would be manifold; a reduction in morbidity and mortality would be expected, as would a reduction in the costs to the NHS associated with asthma, which currently costs the NHS an estimated £1 billion a year, with total associated costs to the UK estimated from £2.3 billion per year to over £6 billion per year. Economic burden of asthma results from poorly controlled disease and asthma exacerbations, which contribute to increased direct medical expenditures related to emergency care as well as indirect costs of lost work time and lost productivity. Over 12.7 million working days are lost to asthma each year.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award
Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Lightpoint Medical Ltd	Developing intra-operative cancer detection technology for keyhole laparoscopic cancer surgery	£1,379,575	£965,702
Project description - provided by applicants			
<p>The project objective is to develop an entirely new detector technology for use in cancer surgery. Surgery remains the primary treatment option for many types of cancer. However, despite recent advances in medical imaging, surgeons surprisingly still rely on sight and touch to remove cancer, often leaving behind cancerous deposits. Cancers that require keyhole or laparoscopic surgery such as lung and colorectal cancer are even more challenging due to the restricted view of the surgical site. The project will therefore develop a technology capable of precisely locating cancer in real-time during keyhole surgery to help aid the detection and removal of cancerous tissue. The technology is based on a recent innovation in beta particle detection. Lightpoint Medical Ltd has secured the exclusive world-wide licence to develop and commercialise this innovation. The project will enable the company to develop the technology from concept to a basic working model that will be tested and validated in a laboratory. Successful commercialisation of the technology will generate important employment and growth opportunities for the wider UK economy. Critically, the project has the potential to have a transformative impact on patient outcomes.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Mironid Ltd	Small molecule activators of cAMP PDE4 long isoforms for the treatment of ADPKD	£606,683	£424,678
Project description - provided by applicants			
<p>Autosomal dominant polycystic kidney disease (ADPKD) is a life-threatening and currently incurable genetic disorder of the kidneys characterised by the development of pathological cysts. It affects some 12.5 million people worldwide, with around 50% of sufferers requiring treatment for kidney failure by the age of 60. Mironid is applying its unique understanding of cellular signalling to develop a pioneering approach to ADPKD therapy, reversing the genetically driven chemical imbalance in the kidneys that drives cyst formation. The project will deliver novel active molecules for rapid optimisation into therapeutics that offer, for the first time, the ability to halt and reverse disease progression in ADPKD. Mironid's new approach to modulating cellular signalling also has potential for treating a number of other diseases with a high unmet medical need, including both rare and more prevalent diseases. This innovative programme therefore provides an excellent opportunity to transform the treatment options available to patients, improve the cost-effectiveness of the NHS, whilst also maximising sustainable economic impact by further establishing Mironid as a leading UK pharmaceutical company with long term growth prospects and employment benefits.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Xerion Healthcare Ltd	Nanoparticle Semiconductor Devices for Pancreatic Cancer Treatment	£343,464	£240,425
Project description - provided by applicants			
<p>The project will develop nanoparticles of complex semiconductors that will be injected into tumours and act to enhance the effectiveness of radiotherapy treatment of cancer. Radiotherapy treatment is often limited by the toxicity of the treatment to healthy tissues surrounding the tumour, meaning that simply increasing the dose is not an option. Xerion Healthcare's novel nanoparticle technology will act to significantly enhance the effects of radiotherapy for the treatment of a range of cancers. The nanoparticles are injected into the tumour and interact with X-rays to generate cell killing free radicals. This project will focus on improving the treatment of pancreatic cancer. Pancreatic cancer is the most deadly of the common cancers with a one year survival rate of 12% and a five year survival rate of only 3%. Over 9400 cases of this devastating disease are diagnosed in the UK alone, over 80% at advanced stages where surgery is impossible and chemotherapy ineffective. This project aims to significantly improve the prognosis of patients with Stage III and IV pancreatic tumours.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Oxular Ltd	Novel Treatment of Retinal Oncology Diseases	£986,000	£690,000
Project description - provided by applicants			
<p>The aim of this project is to advance early stage development of a novel drug delivery device and a related drug product for the treatment of cancers in the eye. Ocular cancers affect tens of thousands of lives globally, including the very young and elderly, and often result in loss of vision or spreading of life threatening cancers to other parts of the body. Visual impairment and blindness cause a considerable economic burden for affected persons and caregivers. The ocular drug delivery device is designed to precisely deliver drugs to the specific site of the cancer in the eye. This is done in a less invasive manner than existing treatments and causes significantly less physical trauma to the patient and mitigates the potential to spread the cancers around the patient's body. The device will be used in combination with a targeted class of drugs, which have been demonstrated to have a potent effect on these ocular cancers. Activities under this project include designing and making prototype devices, developing long lasting formulations containing the specific class of drugs and testing the combinations of drug and delivery device. Once approved, these new treatments will become part of the standard of care for patients with significant unmet needs.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Perspectum Diagnostics Ltd University of Edinburgh Hampshire Hospitals Charity	Hepatica: Quantifying liver health in surgical candidates for liver malignancies	£1,341,830	£1,116,613
Project description - provided by applicants			
<p>This project aims to improve the surgical care of patients with primary and secondary liver cancer. It will do this by developing a new product that uses medical imaging to measure the health of a patient's liver, helping doctors personalise their treatment plans to individual patients. Liver surgery is the treatment of choice for curing cancer in the liver with on-going advances making curative treatment is available to more patients. However, it is difficult to decide how best to treat patients with the ideal combination of surgery, chemotherapy or localised non-surgical treatments. The greater the extent of liver surgery, the greater the risk of complications, which can include death, particularly in patients with unhealthy livers. Surgeons consider the volume of liver that would remain after surgery, but there is a clear need to also consider the health of this liver to reduce complications. Perspectum Diagnostics span out of the University of Oxford to commercialise novel MRI technology for diagnosing liver disease. Its first product was successful in bringing this technology to the clinic worldwide. In this project, Perspectum will join with the University of Edinburgh and North Hampshire Hospital, both internationally-recognised pioneers in the field of liver surgery, to address this important clinical need with a new product 'Hepatica' aiming to improve patient care and reduce healthcare costs.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
MicroPharm Ltd Public Health England University of Leeds	Preclinical development and assessment of an oral therapeutic for Clostridium difficile infection	£581,701	£451,323
Project description - provided by applicants			
Clostridium difficile infections are the commonest cause of healthcare associated infection in the developed world and mainly involve the elderly. Such infections far outnumber MRSA, have a significant mortality and cost the NHS some £400 million annually. The clinical manifestations are due to the release of two powerful toxins into the lower bowel and there are few worse afflictions for the old than one characterised by profuse diarrhoea with its loss of dignity. The present project involves a novel means of treatment that is used as an adjunct to conventional antibiotics and involves the oral administration of specific antibodies which bind to and neutralise the responsible toxins. The antibodies are produced by immunising sheep with miniscule amounts of the inactivated toxins (similar to the vaccination of infants) which are purified and taken orally as a palatable liquid. The liquid also contains excipients that prevent the digestion of the antibodies during their passage through the gastrointestinal tract.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Invitron Ltd	High Sensitivity Chemiluminescent Point of Care Tests for Cardiac Troponin	£633,643	£443,550
Project description - provided by applicants			
Point of care (POC) tests are rapid medical diagnostic tests designed to be carried out next to the patient. POC devices produce results much faster than laboratory tests which enable physicians and nurses to act sooner and thus save lives, improve patient outcomes and reduce overall costs to the healthcare system. However, more widespread use of POC testing is currently limited by the sensitivity of current devices. Invitron is developing a POC test system using high sensitivity chemiluminescent compounds that will enable low cost, portable POC devices to achieve the analytical sensitivity of laboratory analysers.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
LIF Nano Rx Ltd Centre for Process Innovation Ltd Pharmidex Pharmaceutical Services Ltd Queen Mary University of London	CELL-FREE REGENERATIVE MEDICINE: Nano-Engineered "LIFNano" to treat Multiple Sclerosis	£1,001,136	£828,627
Project description - provided by applicants			
<p>NANOMEDICINE (NanoMed) is a new era in medicine that exploits nano-engineering to deliver the right dose of therapy to the right place, at the right time. LIF is a growth factor important for maintaining brain health and the SME "LNT" has pioneered NanoMed for delivery of LIF as a revolutionary approach to treat the devastating autoimmune disease MULTIPLE SCLEROSIS (MS). Incurable, MS attacks the brain, starting in young adulthood and costing the global economy some \$100bn pa. AIMS: having proven LIFNano (LN001) is far superior to the best alternative therapy for MS, this project will now deliver LN001 to patients on two fronts: (i) by establishing the first UK-based commercial resource for NanoMed; and (ii) by securing LN001 in a clinical formula. Three levels of synergy operate: UK manufacture, UK intellectual property with worldwide exclusive licence to LNT, and UK-based global leader in new therapeutic approaches to MS. The gain to the UK economy will be high and the added value of I-UK support to LNT will exceed 100-fold on licencing as Big Pharma become engaged especially since LN001 is applicable to a wide range of degenerative conditions. Further added value is in the increased specialist portfolio of UK's High Value Manufacturing Catapult (CPI).</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Cell Guidance Systems Ltd University of Cambridge	Constrained crystalline growth factors for therapy of synovial joint surface defects	£252,391	£213,622
Project description - provided by applicants			
<p>Osteoarthritis (OA) is a huge problem to the affected individual and the healthcare system. In the UK, 29% of adults over 45 have OA, of which 9% is severe (Arthritis Research UK) equating to 6.5m people. It can cause severe pain in joints, for example the hip and the knee where and can cause great difficulty walking. No current treatment exists for OA with most patients needing a joint replacement. Early in the process, defects can occur in the surface of the joint, the cartilage which contribute to the developmemnt of OA. This study aims to develop a new way of repairing and regenerating cartilage defects. We will use proteins, called growth factors, that are known to help cartilage healing, and will surround them in a new covering inspired by nature, called a polyhedron protein packages (PODS). PODS allows the molecule to be released slowly which we hope will make them better able to heal the cartilage. The anticipated outcome of this project will be to provide vital data on the how effective the new treatment is. This will allow investment to be sought to make these treatments in large amounts and move to the first trials in people with OA.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Microbiosensor Ltd	Evaluation, prototyping and production pathway of a diagnostic for peritoneal dialysis infection	£983,308	£688,316
Project description - provided by applicants			
Increasing numbers of people are suffering from kidney failure, particularly resulting from diabetes. Patients with kidney failure can have two types of dialysis; Peritoneal- or Haemo-dialysis. Peritoneal dialysis can be done at home and gives the patient the most freedom and flexibility, it is also cheaper than haemodialysis. However, it carries a risk of serious infection, and often by the time infection becomes obvious, it can be life-threatening. The project aims to develop a simple new test which can help patients to detect infections at an early stage. This means that treatment could be started more quickly and the infection controlled more easily. The test also gives additional information to the medical team, allowing them to choose the best treatment. The idea for the new test came from the University of Manchester where researchers have been working on detection of bacteria using a colour change reaction. Microbiosensor Ltd are now working to fully develop this test, and a way of manufacturing a reliable, easy to use product. Dialysis patients have been involved in designing the product, and making sure it is easy to use. In this project the new test will be developed so it is ready to be tested by patients.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
AccuRx Ltd University of Southampton	FLOREY: An eHealth antimicrobial stewardship tool demonstrated for RTIs	£536,658	£398,735
Project description - provided by applicants			
<p>FLOREY, is an eHealth/mHealth antimicrobial (AM) stewardship tool which offers a new alternative to antibiotic prescribing for respiratory tract infections (RTIs). When an antibiotic is not indicated, FLOREY will support patient self-care, satisfying the patient's expectation for an active treatment approach whilst also providing a safety net for both the patient and practitioner. It will provide a range of direct cost savings (reduced cost of prescriptions and unnecessary appointments) and indirect cost savings (reduced spend on treating drug-resistant infections) to the healthcare system. FLOREY, developed by AccuRx and the University of Southampton, will consist of 2 main platforms: a practitioner side software package, and patient side SMS message interface. Machine learning and big data analysis will automatically analyse patients' symptomatic progression and offer outputs based on a chosen logic pathway. It will give a practitioner access to a data-driven diagnosis, rather than current empirical techniques, made with a snapshot of information, significant recall bias and no visibility of outcomes. Ultimately, FLOREY will reduce the number of AM prescriptions. This will be highly beneficial to the entire healthcare industry, improving the lifespan of current AM drugs and those in development.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
SAW Dx Ltd University of Glasgow	APOC - multiplexed acoustic point of care diagnostic system for STIs	£1,081,543	£764,857
Project description - provided by applicants			
SAW-Dx Ltd is an emerging point-of-care (POC) diagnostic device design and manufacturing company, using proprietary innovations around ultrasonic technologies. This project will further the ambition of SAW-Dx to meet the growing demand for POC diagnostic tests for sexually transmitted infections. Currently the Center for Disease Control estimate >20M new STIs every year, in the US alone. We propose that our Acoustic-Flow technology will form the basis of a rapid nucleic acid test (NAT) for STIs. Once demonstrated, the technology also has potential to reach into other POC diagnostics markets (including e.g. tuberculosis and HCV) in the future. This project will build and validate a prototype (portable reader and disposable cartridge) to drive a diagnostic test to a result, with no user intervention after the sample enters the test device (or chip), within 30 min. This will enable the immediate treatment of the patient (currently patients must return to obtain their results after several days many do not). Our future ambitions will see our platform being adopted into a number of different healthcare markets - as its simplicity lends itself to cross-platform compatibility.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Bactevo Ltd	Discovering Novel Antibiotics Against Highly Resistant Gram-Negative Pathogens	£1,496,147	£1,049,990
Project description - provided by applicants			
Nearly all of us have taken antibiotics: they really are a 'wonder drug' saving millions of lives every year, by specifically killing bacteria. They are rapidly becoming less effective as bacteria develop ways to resist them. An example of this is the spread of MRSA in hospitals. A recent review (The O'Neill Report) conducted by the UK government with the Wellcome Trust concluded that by 2050 antibiotic resistant infections would kill more people each year than cancer, and many common medical procedures such as hip replacements or Caesarean sections will become too dangerous to perform. New antibiotics are badly needed, and soil organisms have been one of the best sources of antibiotics over the last 70 years. However, soil organisms may only make an antibiotic under certain conditions which are hard to copy outside of their natural environment, which makes identification and exploitation difficult. Bactevo have isolated hundreds of organisms from the soil and hard-wired them to make all the chemicals they can make, including antibiotics, all the time. We then screen them for their ability to kill dangerous bacteria. The work is now progressing to advance these chemicals through to the creation of novel, effective antibiotics, ensuring future generations will have access to these vital drugs.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Plasticell Ltd University of Edinburgh	A combinatorial approach to generate blood cells from hPSCs	£1,134,478	£920,438
Project description - provided by applicants			
Blood transfusion is one of the most common clinical therapies and plays a critical role in prevention and management of many health conditions and diseases. Around 90 million red blood cell transfusions are carried out every year and this rising demand is dependent on a limited supply of healthy donors. The supply problem is compounded by other issues including transfusion transmitted infections, immune compatibility and the quality of the donated product. These problems could be solved by generating red blood cells in the laboratory from a limitless and infection-free source such as human pluripotent stem cells. Although possible, the process takes several weeks, is costly and the cells that are made are not fully mature. This project aims to develop improved culture protocols that reduce the time and cost, optimize the production of fully functional cell types and amenable to clinical standards and scaleup. We will perform the first large scale systematic assessment of culture conditions using Plasticell's Combinatorial Cell Culture technology and pluripotent stem cell lines carrying fluorescent reporters that track red blood cell production. As well as transforming existing blood transfusion services, this new source of red blood cells would provide a much needed supply in developing countries.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Cypralis Ltd	Selective inhibitors of cyclophilin D for acute pancreatitis	£319,921	£191,953
Project description - provided by applicants			
<p>The current project is directed at the development of a new therapy to treat acute pancreatitis (AP). AP is an extremely painful disease that is most often associated with gall stones, excessive alcohol intake and obesity and is currently treated in the hospital with supportive therapy only. However, a significant proportion of patients with AP can progress to more life threatening conditions due to the pancreas inflammation affecting other body organs. This inflammation is the result of cell death in the pancreas and new treatments that can prevent this have been shown to be effective at preventing AP in animal studies. Cypralis has discovered new compounds that can act on pancreatic cells and stop the disease from progressing. These compounds are being developed by Cypralis as the first disease-modifying treatments for AP. This project is to improve the manufacturing process of the compounds, to develop an intravenous injection of the drug and to show the drugs work and are safe in a number of animal models of AP.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Oxford Caresense Ltd	Sensor For Incontinence Management	£252,804	£176,964
Project description - provided by applicants			
NHS estimates, 3-6 million people in the UK have urinary incontinence of which 3 million are regularly incontinent and there are 360 incontinence clinics in the UK alone. Elsewhere, there are 240 million sufferers in the western world; 25 million in Europe requiring 15 million manual incontinence assessments per year. Associated labour costs are estimated at \$20 bn; \$9 bn worth of UI products are sold each year, expected to rise to \$30 bn by 2030. Considering labour and consumables, the management of incontinence is arguably the biggest single cost for long-term residential aged care facilities. The market for incontinence nappies reached \$2 bn globally in 2013, growing 7% according to Consumer Edge Research/Euromonitor. Incontinence nappies are being routinely used for the management of UI. They often have a colour indicator to show when change is required. They colour change depend on pH acidity values, is not totally reliable. They also require regular checks with significant cost implications. Oxford Caresense Ltd. proposes a novel low cost wetness sensor with major advantages: i) enable remote monitoring of all patients simultaneously ii) saving cost by enabling just-in-time change iii) reducing incidences of secondary problems such as nappy dermatitis and v) enable self-management.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Discuva Ltd	Exploitation of transport mechanisms for novel Gram-negative antibiotic drug discovery	£1,500,000	£1,050,000
Project description - provided by applicants			
<p>We need new classes of antibiotics because multi-drug resistant (MDR) bacteria are threatening our ability to treat infectious disease. The UK government estimates that without new antibiotics infectious disease will cost the global economy \$100 trillion by 2050. Discuva's innovative (and proprietary) technology (SATIN) is a proven platform for the discovery of new antibiotics; SATIN has already delivered new antibacterial compounds with novel mechanisms-of-action and within our lead programme clinical trials are planned in 2017 for the treatment of MDR gonorrhoea. This project will use this UK invented technology to deliver improved antibiotics which are both highly active against some of the most resistant bacteria causing disease and have a reduced likelihood of selecting resistance compared to conventional antibiotics. This will address the issue of clinical failure associated with the most resistant and life-threatening bacterial infections including E. coli. Ultimately, this project has potential for significant benefits to patients, the NHS (and health care systems globally), and the antibiotic research community.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Sense Biodetection Ltd	Development of a Single-Use Molecular Point-of-Care Diagnostic Test for Influenza and RSV	£508,130	£355,691
Project description - provided by applicants			
Infections that affect patients breathing, such as influenza and respiratory syncytial virus (RSV), cause over 6 million hospital admissions and c.700,000 deaths globally each year. There is a need to focus on better diagnosis and treatment of respiratory illnesses including cutting the use of antibiotics when they are not required. Laboratory diagnostic tests using molecular methods are very accurate but need complex equipment and systems meaning results take a long time which is highly problematic when decisions about treatment need to be made quickly. Rapid point-of-care tests, similar to a pregnancy test, are cheap and convenient but miss many cases of infection and do not detect multiple different viruses in a single test. We are developing a new technology combining the gold standard performance of molecular laboratory tests with the speed, low cost and ease of use of rapid tests. The benefits of our test would include improved treatment of patients, fewer hospitalisations, better use of antibiotics, fewer deaths and significantly lower overall costs. Future use by hospitals, GPs and nursing homes would also enable more effective prevention and infection control.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Eva Diagnostics Ltd The Royal Marsden NHS Foundation Trust Imperial College Health Partners Ltd University of Oxford	Comprehensive blood counts in a handheld device: home monitoring in chemotherapy	£997,453	£741,655
Project description - provided by applicants			
For many individuals with cancer, chemotherapy forms a key aspect of treatment. Across the various types of chemotherapy, the majority carry significant side effects that often include the reduction of blood cell counts. The lowering of blood cell counts exposes individuals to higher risk of adverse events such as infection. Low blood counts are also the major cause of delayed treatment or reduced treatment dosage. Such issues can significantly impact the chance of successful treatment, as well as incur greater cost to healthcare systems. Through new analytical technology, this project is seeking to develop a smart handheld technology capable of monitoring blood counts from a single drop of blood. Through home use, our technical solution can optimise treatment delivery, ensure that clinical pathways are closely built around the individual's needs and significantly reduce healthcare expenditure.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Oxford Genetics Ltd	Accelerated bioselection of monoclonal antibodies recognising integrated membrane proteins	£481,130	£336,791
Project description - provided by applicants			
<p>Antibodies are one the most successful treatments for a range of human diseases, including virus and bacterial infections and cancer. They work by binding to other molecules, thereby inactivating them or allow the immune system to clear them from the blood. However, the isolation of antibodies that recognise a specific target remains challenging, significantly reducing progress, particularly for complex cell surface membrane proteins. This is because most methods to generate antibodies use purified proteins, and often these do not share the same shape as the natural protein. Our approach circumvents these issues, providing a simple, rapid and scalable approach for bioselection of lead candidate antibodies. During this project we will demonstrate our technology by generating antibodies against the two valuable targets, including a G protein coupled cell receptors (GPCRs, e.g. DRD1) and also against a cancer immune checkpoint inhibitor (e.g. PD1). Our technology will provide antibodies with many diagnostic, scientific and therapeutic applications. We aim to: (i) Use bioinformatics to produce antibody libraries with greater diversity, (ii) Demonstrate the technology to find antibodies targeting DRD1 and PD1, (iii) Characterise the new antibodies for therapeutic applications.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award
Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
The Native Antigen Company Ltd	Development of a point-of-care, non-crossreacting Zika diagnostic test	£456,177	£319,324
Project description - provided by applicants			
At the start of 2016, Zika virus hit the headlines with an outbreak in Brazil far larger than any seen before, causing a huge rise in the number of children born with smaller than average heads and other abnormalities. As this virus is relatively recent, there are very few diagnostic methods of detecting the disease it causes, and most of the currently available ones can't tell the difference between Dengue Fever and Zika. We intend to use our unique Zika virus products to develop a quick and easy test for Zika virus that does not show a false positive reaction with Dengue virus. By developing a test that works like a pregnancy test, we hope to provide reassurance to millions of mothers-to-be who live in tropical countries and want to start a family without the fear of birth defects.			

Note: you can see all Innovate UK-funded projects here
<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Glythera Ltd	Improving the Therapeutic Index of Antibody Drug Conjugates Through Precision Conjugate Design	£1,080,236	£756,165
Project description - provided by applicants			
<p>Antibody Drug Conjugates (ADCs) are an emerging class of targeted therapeutics with the potential to improve therapeutic index over traditional chemotherapy. By combining the targeting power of antibodies with the cell killing capability of potent cytotoxic molecules, it is possible to kill cancer cells more effectively whilst reducing debilitating side effects. Broadly, anti-cancer activity is driven by toxicity of the toxin, whilst tolerability is governed by stability of the conjugation chemistry and tissue distribution of the antigen (i.e. whether the target is present in healthy tissue or not). The project will exploit Glythera's innovative, highly specific and stable PermaLink technology in combination with its portfolio of novel toxins and antibodies to develop safer and more efficacious ADCs for the treatment of hard to treat tumours including pancreatic, lung or ovarian cancers to name but three. Antibodies that are assessed as suitable for ADC application according to pre-determined criteria will be combined with a range of novel, ultra-potent toxin molecules via Glythera's PermaLink conjugation chemistry. Data from the in vitro and in vivo studies of these conjugates will be used to prioritise the most promising candidate for a pre-clinical development program leading up to 'first in man studies'.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
BrainWaveBank Ltd Queen's University Belfast	In-home screening of cognitive ageing to enable improved patient outcomes	£582,088	£440,662
Project description - provided by applicants			
<p>A novel neuroscience platform is proposed that allows anyone to directly measure and track their cognitive health in just a few minutes a day from the comfort of their home. This low cost approach will make quantitative, objective cognitive health tracking accessible to all and transform our understanding of brain health including how lifestyle, age, and disease affect it. In particular it will enable the large scale screening of at-risk populations for the earliest stages of progressive neurodegenerative diseases including dementia. Early detection of these conditions can help transform the cost of care, extend quality of life, and inform clinical research focused on disease modification or cure. Daily brain health is measured using a low-cost, high-resolution brainwave scanning headset (also known as an electroencephalography, or EEG, headset) that is worn while playing engaging mobile games that test different aspects of cognitive function, changes in which are associated with different neurodegenerative diseases. Advanced machine learning methods extract digital biomarkers from this data associated with lifestyle factors, age, and illness. These biomarkers will enable early detection of illness and support development of novel diagnostics, drugs and therapies.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Antikor Biopharma Ltd	Antibody Fragment Drug Conjugates - Overcoming the challenge in treating Gastric Cancer	£1,169,280	£810,000
Project description - provided by applicants			
Antikor Biopharma is pioneering an innovative drug delivery platform called OptiLink. It harnesses the immune system by using tumour-seeking antibodies to specifically deliver potent cytotoxic payloads to tumours. Unlike its competitors, who use full antibody-drug conjugates (ADCs), Antikor's technology enables much smaller fragment-drug conjugates (FDCs) to be developed. These have many advantages: FDC products potentially have a higher therapeutic index for cancer therapy as they are more potent, can be dosed more aggressively because they clear from normal tissues more quickly and penetrate rapidly and deeply into tumours enabling faster tumour destruction. Antikor is developing an FDC for gastric cancer which promises to overcome the challenges in treating this disease. This project entails the discovery and manufacture of a number of candidates, based on existing, compelling proof-of-concept data, with in vitro and in vivo analyses in human tumour models of gastric cancer, to lead to a candidate that can be taken into clinical development.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Amaphase Ltd Queen's University Belfast	Development of a transdermal delivery product for self-care with enhanced delivery & API stability	£254,075	£211,990
Project description - provided by applicants			
Amaphase is developing a novel and versatile transdermal patch for use across multiple applications from pain relief to chronic skin conditions. Its patented technology allows Active Pharmaceutical Ingredients to be stabilised for long periods without the need for harmful preservatives and, once activated by the user, will facilitate deeper and more efficient delivery into the skin through an innovative sequence of materials science and chemistry-based events. The company has employed experienced industrial designers throughout the prototype development phase to work in parallel with the formulation of the chemistry to investigate and create solutions which enhance the whole user experience from first use to disposal. Maximising ease of use for self-care to achieve medicines adherence in an ageing population with chronic conditions poses a number of challenges, not least mobility, dexterity, strength, single handed application, removal and safe disposal. The aim is to take a fresh look at self-administered treatments where ease and simplicity of use will significantly contribute to the likelihood of market success.			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Elasmogen Ltd	soloMER™ Biologics: Next-generation therapeutics for the site-specific treatment of ocular diseases	£979,395	£685,575
Project description - provided by applicants			
Elasmogen's technology is a unique soloMER drug platform exploiting the power of proteins (biologics) as drugs but in small, simple and stable formats. Elasmogen have a pipeline of products in pre-clinical development for the treatment of inflammatory diseases of the eye. Current first-line therapies for these diseases are corticosteroids, but up to one third of patients fail to respond with many more suffering side-effects and the real risk of going blind. The use of targeted protein-based approaches have shown benefits, and particularly in this group of unresponsive patients. There remain however, significant efficacy limitations to the current use of biologics. Their large molecular weight and fragile nature limits routes of drug administration to injection into the blood stream or directly into the eye. This funding will progress our existing next-generation biologic therapies that, despite their size, are potentially anti-inflammatory but are also stable, soluble and therefore amenable to non-invasive, site-specific, topical delivery (eg modified eye drops).			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Cantab Anti-infectives Ltd	A polymyxin-based potentiator for treatment of MDR Gram-negative bacterial infections	£1,143,482	£800,437
Project description - provided by applicants			
<p>The O'Neill report identifies antibiotic resistance as one of the most important issues threatening our way of life. The potential consequences of failure to address this threat are assessed as 10 million deaths per annum by 2050 at an economic cost of 100 trillion US dollars. This project addresses one of the most difficult to treat classes of bacterial pathogen which is becoming recalcitrant to almost all available therapeutic options - MDR Gram-negative bacteria. For these bacteria, a class of antibiotics called carbapenems was the mainstay of treatment until resistance to this class started to develop. An old antibiotic class called polymyxins, whilst rather toxic, was then revived to provide a somewhat imperfect stop gap. In treatment of viral diseases and even bacterial infections such as tuberculosis, it is accepted that combinations of drugs are needed for effective treatment. Cantab is proposing to develop an innovative combination of a novel low toxicity polymyxin derivative with a partner antibiotic which is able to provide effective coverage for even the most difficult to treat infections. Public support is needed to address the economic uncertainties of the antibacterial market and to help to secure the future of Cantab as a UK-based antibiotic developer.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award
Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Mologic Ltd	SEPSIS Alert Test	£1,255,191	£878,634
Project description - provided by applicants			
<p>Sepsis is one of the most common deadly diseases and one of the leading causes of death in the developed world exerting a huge human and economic toll. In the UK there are over 100,000 cases and 37,000 deaths annually. Rapid diagnosis is critical to the effective treatment of the patient and offers the prospect of reduced mortality but existing diagnostic tools lack the sensitivity and/or specificity needed for effective stratification of sepsis to enable early, effective treatment. Mologic is developing an easy-to-use, 10 minute lateral flow based assay that can be used in hospital A&E, wards and intensive care units by bedside nurses to provide rapid discrimination of sepsis. This will enable faster treatment, stratification of patients by degree of risk into appropriate care areas, and financial savings in hospital systems by both reducing complications and overtreatment. The single use cartridges will be compatible with a sample of whole blood which could be obtained from a fingerprick or a venous blood sample.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> **Use the Competition Code given above to search for this competition's results**

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
InhibOx Ltd	Dual-target tRNA synthetase inhibitors for the treatment of drug-resistant bacterial infections.	£1,317,433	£992,203
Project description - provided by applicants			
<p>This project aims to develop a new antibiotic for the treatment of serious bacterial infections. Many antibiotics have been developed in the past, but bacteria have developed resistance to antibiotic drugs, so new drugs are urgently needed. Protein production is a key requirement for any life form, including bacteria, and there is a family of twenty enzymes involved in the key step of combining amino acids with RNA prior to attaching the correct amino acid to the growing protein chain. A drug that stops one of these enzymes working weakens the bacteria, allowing them to be mopped up by the body's defences. However, bacteria can evolve resistance to such inhibitors, leading to a modified version of the enzyme that is no longer blocked by the drug. This project aims to develop inhibitors that target more than one member of the enzyme family. By interfering with protein production at two independent points in the process, the bacteria are forced to evolve mutations in their DNA coding for two separate enzymes. The chances of this happening successfully are a tiny fraction of the possibility of becoming resistant to one enzyme, greatly reducing the chance of resistance developing against the drug.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results

Innovate UK

Results of Competition: Biomedical Catalyst 2016 - Early Stage Award

Competition Code: 1607_CRD1_HEAL_BMC

Total available funding for this competition is £21,687,102 from Innovate UK, £300K from Scottish Enterprise and £698,014 from MRC

Note: These proposals have succeeded in the assessment stage of this competition. All are subject to grant offer and conditions being met.

Participant organisation names	Project title	Proposed project costs	Proposed project grant
Arterius Ltd	In-vitro and In-vivo GLP Evaluation of the Novel Bioresorbable Coronary Scaffolds; ArterioSorb™	£1,116,300	£781,410
Project description - provided by applicants			
<p>This project aims to develop a new antibiotic for the treatment of serious bacterial infections. Many antibiotics have been developed in the past, but bacteria have developed resistance to antibiotic drugs, so new drugs are urgently needed. Protein production is a key requirement for any life form, including bacteria, and there is a family of twenty enzymes involved in the key step of combining amino acids with RNA prior to attaching the correct amino acid to the growing protein chain. A drug that stops one of these enzymes working weakens the bacteria, allowing them to be mopped up by the body's defences. However, bacteria can evolve resistance to such inhibitors, leading to a modified version of the enzyme that is no longer blocked by the drug. This project aims to develop inhibitors that target more than one member of the enzyme family. By interfering with protein production at two independent points in the process, the bacteria are forced to evolve mutations in their DNA coding for two separate enzymes. The chances of this happening successfully are a tiny fraction of the possibility of becoming resistant to one enzyme, greatly reducing the chance of resistance developing against the drug.</p>			

Note: you can see all Innovate UK-funded projects here

<https://www.gov.uk/government/publications/innovate-uk-funded-projects> Use the Competition Code given above to search for this competition's results