Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
Sentinel Oncology Limited	Validating a New Therapeutic Opportunity for the Treatment of Alzheimer's Disease	£194,901	£136,431
Project description - provided by applicants			
There are no effective treatments for Alzheimer'™s disease. The incidence and health care costs of treating dementia are set to increase in the coming decades and there is an overwhelming need for effective treatments. Sentinel Oncology Limited (SOL) has developed a new class of drug			

coming decades and there is an overwhelming need for effective treatments. Sentinel Oncology Limited (SOL) has developed a new class of drug molecules that have the potential to treat Alzheimer'™s Disease. These new drugs would work by preventing the production and activation of proteins in the brain that are involved with the progression of the disease. The purpose of this project is to carry out proof-of-concept experiments to confirm if the SOL drugs have the potential to treat patients with Alzheimer'™s Disease.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
Emblation Limited	Microwave treatment for anogenital	£117,588	£82,312
University of Glasgow	disease (MiTAG)	£79,756	£79,756

Project description - provided by applicants

The primary objective of the project is to explore the feasibility of a new treatment for cervical precancerous disease and genital warts by designing new applicators and repurposing an existing product used to treat verrucas. All three diseases are caused by infection with human papillomaviruses (HPV) but differ in the exact type of HPV involved. The objective will be met through a combination of experiments, analysis and developing the hypothesis of how microwaves interact with HPV-associated lesions in a therapeutic manner. This innovative approach to treating HPV-associated disease needs preclinical work before ethical approval could be sought for an in-human trial. The subsequent product will treat the HPV disease rather than removing the affected tissues which will be less invasive and could reduce reinfection. There is substantial scope for other application areas that involve HPV infections in and on the body e.g. oral lesions and other pre-cancerous infections. Emblation will assess the business models needed to fully commercialise this new application in UK, EU and US markets. The feasibility of the new applicators will be made through discussions with clinicians, patients and technical interface analysis.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
Anipoc Limited	DiaPOC - Assessing the feasibility of a rapid, accurate, pocket sized HbA1c POC	£139,179	£97,425
Project description - provided by applicants			

Froject description - provided by applicants

Type 2 diabetes is a chronic condition that affects 3.5m people in the UK and costs the NHS £13bn annually. Through improved monitoring and condition managment a patient'™s risk of death can be dropped by 50% within 5 yrs. Assessment of a patients'™ glycated haemoglobin is a World Health Organisation (WHO) mandated reliable indicator of progress. Point-of-care solutions provide the best approach to this challenge, however current products on the market are insufficient. Only three meet clinically accepted performance criteria, and these are large, costly and relatively slow solutions. At AniPOC, we propose a pocket-sized, truly portable, accurate and precise device that delivers results "while you wait'™ for the most advanced management of Type 2 diabetes available. This project aims to determine the commerical pull and market opportunity for such a technology.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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	
Haemoconcepts Ltd	Haemopulse - an innovative anti- DVT device	£192,516	£134,761	
Project description - provided by applica	ants			
Project description - provided by applicants Deep Vein Thrombosis (DVT) is a major cause of morbidity and mortality that is well recognised. Current intermittent compression devices have several major drawbacks. This feasibility project will help develp a device called Haemopulse. Features include, portability, improved patient compliance, less variability of pressures generated and lower cost to manufacture. The project will involve focus groups including patient and healthcare staff and compare the leading intermittent compression devices on the market. Further design planning will enable the manufacture of a cost effective and more efficient patient friendly device, increasing compliance and at least obtain equivalence to the market leader with regards to effectiveness. Haemopulse will not only address the drawbacks of the current devices on the market but could potentially save the NHS £12.5 million a year as well as boosting the economy in the medical device sector.				

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
IMSPEX Diagnostics Ltd	Rapid point of care test for Group	£116,122	£69,673
	B streptococcus in late pregnancy and onset of labour	£33,356	£33,356

Project description - provided by applicants

GBS is a common bacterium found in the vagina of about 2 in 10 women in the UK. Being a carrier is not harmful to you, however, many babies come into contact with GBS during labour. The vast majority of babies will suffer no ill effects. However, if GBS is passed from mother to baby at time of the birth, there is a small chance the baby will develop an infection and become seriously ill. There is no screening program available for GBS in the UK and the NHS currently uses a risk factor approach, which means that some women receive antibiotics when they don'™t need them. This is because although GBS can be detected by a swab taken in late pregnancy the current testing method used by the NHS is not very reliable when a negative result is found and can take 4 days to get a result. A more accurate result can be obtained by another method, but this is only available privately as it is too expensive. This study will use a new machine called a GC-IMS. Previous work has shown it to be very accurate when testing for GBS and can report the result in less than 10 minutes. If this device were then used in the NHS it could detect GBS as soon as women go into labour and doctors will be able to give antibiotics if necessary, therefor reducing risk to new born babies.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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		
Clean Blue Limited	Next Generation Catheter	£89,585	£62,710		
Project description - provided by applica	Project description - provided by applicants				
Project description - provided by applicants Each year, over 100 million people around the world need to use a urinary catheter. However, they currently cause infections resulting in around 2,000 deaths in the UK each year and £83,000 in treatment costs for a typical hospital. We have developed a technology that will significantly reduce catheter infections, without the use of pharmaceuticals. With the ageing of the population in the UK and around the world, the number of people requiring a catheter is rising. By reducing the rate of infection, thousands of patients a year will suffer less and require fewer inconvenient catheter replacements, leading to an all round better, more comfortable experience. This reduction in infection will also save a typical hospital tens of thousands of pounds a year as well as reducing overcrowding, a prominent issue at present. By reducing the need for antibiotic treatment, we will also significantly reduce the spread of antibiotic resistant bacteria. We are a mico entity based in England, founded in July 2015					

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
	IBEX Enhanced Cone Beam Computed Tomography (eCBCT)	£189,590	£132,713
Project description - provided by applicants			

IBEX Innovations has recognised an opportunity to adapt its patented X-ray detector technology to Cone Beam Computed Tomography (CBCT). CBCT is a medical X-ray imaging technique that enables 3D reconstructions of body parts to be collected using a much simpler, cheaper and more flexible set-up compared to conventional Computed Tomography (CT) systems. However increased levels of scattered X-rays reach the detector, resulting in reduced image quality compared to standard CT. This has restricted the adoption of CBCT in medical imaging to niche markets such as extremity imaging. The IBEX technology has been proven to reduce the effect of scatter in standard digital radiography systems used in fracture clinics and also provides accurate materials information, such as Bone Mineral Density data, that can be used to diagnose Osteoporosis. This project will adapt the IBEX technology to CBCT imaging with the result of improving image quality to a level similar to regular CT and providing additional materials information to aid in diagnosis of a variety of conditions. Project success will enable widespread adoption of CBCT for medical imaging and offer significant benefits to patients and the NHS in terms of dose and cost savings, improved patient comfort and equipment availability.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
Malvern Cosmeceutics Limited	Novel Nanoparticle Targeting of	£65,204	£45,643
University of Wolverhampton	Antimicrobials to Infected Diabetic Foot Ulcers	£57,211	£57,211

Project description - provided by applicants

Collaborative feasibility study between three partners based in the West Midlands; Malvern Cosmeceutics Limited, the School of Biology, Chemistry & Forensic Science and the School of Biomedical Science and Physiology both at University of Wolverhampton together with clinical oversight from New Cross Hospital Wolverhampton, focussed on applying MCL'™s proprietary nanoparticle delivery system, Lipodisq®, for topical treatment of infected diabetic foot ulcers (DFUs). Particular attention will be placed on improved targeting of existing approved drugs to Gram(-) bacteria especially those likely to develop multi-drug resistance (MDR) and implicated as the causative organisms in the development of severe and recurrent cases of DFUs, treatment of which currently consumes approx 1% of the NHS budget (£662 Million per annum). The commercial objective is to develop a high value, topical pharma product, future-proofed to overcome evolving bacterial resistance mechanisms, suitable for clinical trial, local manufacture and global distribution either directly by MCL or in partnership with UK-based wound care companies.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
Oppilotech Ltd	Development of a Novel Wall Teichoic Acid Inhibitor as an Oral Combination Therapy for MRSA	£193,028	£135,120

Project description - provided by applicants

The emergence of multi-drug resistant bacteria is now a major public health concern. Reports from the Wellcome Trust, World Health Organization and the Chief Medical Officer of the United Kingdom have highlighted the urgent need for the identification and development of new antibiotics, especially those with novel modes of action. Antibiotic resistance will threaten routine surgery as infections become untreatable and some types of treatments such as cancer chemotherapy and organ transplantation, which suppresses the patient'™s immune system, will no longer be viable. Oppilotech Ltd was founded to develop novel antibacterial compounds to address the dearth of new classes of antibiotics. The company'™s lead drug development programs are based on the exciting finding that an approved orally bioavailable drug used for the treatment of a chronic inflammatory disease also has potent antibacterial properties (including MRSA) and represents a new class of antibiotics. The project will exploit this exciting discovery by funding key experiments to pave the way towards a viable development route to the clinic.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
Optical Diagnostics Ltd	Diagnostic device for early detection and monitoring of macular diseases	£52,703	£36,892
Project description - provided by applicants			

Project description - provided by applicants

This project concerns a new easy-to-use, low-cost, sensitive diagnostic device for the early detection of Age-related Macular Degeneration (AMD), Diabetic Retinopathy (DR) and other retinal eye diseases. This is the first innovation to be brought to market by Optical Diagnostics Ltd, a spin-out company from the University of Warwick formed to exploit leading-edge research in ophthalmology. At the heart of this device is a new patented concept which allows early detection of eye diseases including macular degeneration. This offers a step-change in the economic and social benefits which can be realised through early detection of the most common cause of blindness in the Western world "" over half a million people in the UK alone suffer from AMD. Early detection is key to ensuring that all treatment options and support start as soon as possible in order to preserve vision. The diagnostic device offers a first time opportunity for a reliable home-based monitoring of macular disease progression. The aim of this project is to develop a range of devices, with different configurations suitable for different testing environments that can subsequently be evaluated for clinical use to inform the development of prototype devices and to underpin plans for commercialisation.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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 Limited	Cyclophilin Inhibitors for Chronic	£119,479	£71,687
University of Liverpool	Pancreatitis	£80,000	£80,000

Project description - provided by applicants

Chronic pancreatitis is a severely painful inflammation of the pancreas that frequently requires admission to hospital and prevents normal life. Currently there is no drug treatment that affects the course of chronic pancreatitis and patients are typically treated only to alleviate their pain. As the disease progresses the pancreas undergoes degradation, along with fibrosis, which can lead to malnutrition, and also diabetes. Cypralis has identified compounds that can prevent degradation of pancreatic tissue and, separately, compounds which can inhibit signs of fibrosis. The current project is designed to test compounds to find examples that possess both activities. These compounds will be tested for activity in models of chronic pancreatitis. This project will set the stage for an advanced drug discovery project to find a drug that can prevent this serious disease from progressing further.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
	Lowering the incidence and death- rate of invasive candidiasis through probiotic bacteria in the gut.		£80,245
Dreject description provided by employed			

Project description - provided by applicants

Candida yeast is a common cause of infections of the mouth and the vagina, which are irritating but not life-threatening. However, if Candida enters the bloodstream it causes a dangerous disease known as invasive candidiasis (IC). About one-third of people with IC will die from it (as the Candida infects organs of the body and becomes very difficult to eradicate). IC has become more common in recent years, as a side-effect of an increase in the number of people with weakened immune systems, particularly those in hospitals undergoing treatment for other conditions (e.g. cancer chemotherapy). One-third of the population carry Candida cells in their intestine, and normally they are harmless, because good bacteria in the gut keep the Candida under control. But broad-spectrum antibiotics can destroy the good bacteria, and leave yeasts unaffected, and able to become dominant. From there, the Candida may cross the gut wall into the bloodstream. This project will use sophisticated selection methods to identify strains of good bacteria with characteristics to eliminate Candida cells from the gut; and so greatly reduce the risk of developing IC. Such strains will be incorporated into a probiotic product.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
	"A Novel Therapeutic Gel Option for Improvement of Joint Function in OsteoArthritic Patients "	£95,551	£66,886
Desired description - recycled by configure			

Project description - provided by applicants

Osteoarthritis [OA] is a significant global healthcare challenge. It is a long-term chronic disease, is characterized by the thinning of synovial fluid and subsequent deterioration of cartilage in joints which results in bones rubbing together and creating stiffness, immobilising pain, and impaired movement. OA most commonly affects seniors and is expected to sharply increase with an aging population. This project seeks to full study the Feasibility of employing a novel therapeutic gel for the improvement of joint function in osteoarthritic patients. It will investigate translating the use of a patented microgel targeted for use in the spine, and assess the idea of leveraging the physical capacities of this 'SXM' gel to create intraarticular cushioning. The gel would be introduced to the joint through a small needle without creating further damage. As the gel cures it becomes heavily viscous and can act as a cushion gently distributing the load over a larger surface thus minimising the risk or the speed of further damages allowing natural motion with reduced pain. Gelexir Healthcare Ltd who have developed the SXM gel will simultaneously develop a full commercialisation Business Plan containing full market details, commercial strategy and estimates the economic benefits to patients and healthcare providers.

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

Results of Competition:Biomedical Catalyst 2017 Round 1 - Feasibility StudiesCompetition Code:1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
Carena Healthcare	Metal sintered replacement heart	£111,051	£77,736
I had some the state of Country and the second second	valve frames: Feasibility of clinical support and personalised care	£74,168	£74,168

Project description - provided by applicants

Carena Healthcare is seeking to commercialise its innovative approach to the design and manufacture of replacement heart valves. In an ageing population, diseases of the heart valves represent a growing problem, affecting more than 12% of people over the age of 80. With the increasing popularity of transcatheter heart valve replacement (TVR), a commercial opportunity now exists to lower the cost of the TVR procedure, particularly the cost of the prosthetic valves, and to provide a more personalised form of treatment and device. Consequently, lower procedure costs combined with cost savings from better patient outcomes and reduced follow-up treatment will be very attractive to health service providers. This project seeks to address these issues by introducing a patient-specific approach to procedure planning, device design and manufacture. Carena Healthcare aims to confirm the technical and commercial feasibility of manufacturing (i) personalised TVR frames and (ii) a personalised procedure planning kit with which clinicians will be able to better assess the best devices and procedures to use for individual patients. These innovations are made possible by Carena'™s patent-pending inventions for devices and the method of manufacture using 3D printing.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
LIG Biowise Ltd	Respiratory Infection Detection (R-	£117,974	£82,582
The Robert Darbishire Practice Limited	ID) assay	£12,020	£7,212

Project description - provided by applicants

Infectious diseases are one of the major causes of global morbidity and mortality, resulting in 16.2% of deaths per year. Currently, there is no fast diagnostic tool available to detect and identify the different pathogens responsible for the most common infections, which leads to unnecessary prescription of antibiotics and the subsequent development of drug-resistant strains. LIG Biowise are developing an innovative Respiratory Infection Detection (R-ID) assay. The assay will combine targeted pathogen lysis with in situ amplification of pathogen DNA to detect a panel of common respiratory pathogens in 45-60 min. The R-ID assay will have the potential of becoming a core technology for future precision treatments of microbial infections as it will be applicable at the point-of-care and it will not require costly equipment or advanced technical expertise. This grant will support a 12-month feasibility study aimed to develop the pathogen detection methods for the R-ID assay.

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

Results of Competition:Biomedical Catalyst 2017 Round 1 - Feasibility StudiesCompetition Code:1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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	
Elpis Biomed Limited	Do human induced oligodendrocyte precursor cells myelinate? - Feasibility for cell therapy	£99,745	£69,822	

Project description - provided by applicants

Expectations are increasing for regenerative medicine to address unmet clinical needs of devastating neurological diseases. Especially promising data are emerging from a US company'™s pioneering clinical trial for patients with spinal cord injury in which human oligodendrocyte precursor cells (OPCs) are transplanted into the spinal cord. A major drawback of the existing approach, however, is the long and complex directed differentiation protocol required to produce human OPCs. Elpis BioMed'™s core technology provides an alternative approach enabling highly efficient production of OPCs in a single step. Our cellular reprogramming technology is not only faster but also safer than conventional protocols as it should eliminate the possibility of tumour formation. Elpis BioMed Ltd'™s main objectives are to provide cells for drug discovery and toxicology and for therapeutic use in chronic neurological conditions. The present application proposes to test I. technical feasibility of using our OPC cell product as a cell therapy in a preclinical model. II. commercial feasibility by evaluating the market opportunity and costs, and III. regulatory feasibility by engaging with relevant regulatory bodies and establishing the preclinical requirements that need to be met in order to advance our product into a cell therapy.

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

Results of Competition:	Biomedical Catalyst 2017 Round 1 - Feasibility Studies
Competition Code:	1701_FS_HEAL_BMC2017_R1

Total available funding is £2m

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
	Assessment of novel nanoformulations for the treatment of acne		£88,981

Project description - provided by applicants

Acne is a common disease, which can turn into a serious chronic disorder leading to permanent scaring and disfigurement. The current market for acne treatments is worth approximately \$2.8 billion/annum (2016) but is dominated by poorly efficacious over-the-counter treatments, which are often reformulations of the same active ingredients (e.g. benzoyl peroxide, salicylic acid). More effective treatments (e.g. steroids, retinoids) can only be used for short periods of time due to significant safety concerns and so are only prescribed for the most severe cases of acne. With the support of Innovate UK, Blueberry Therapeutics is exploring the feasibility of a range of new topical nanomedicnes for acne. If successful, these new medicines will represent a step forward in acne treatment with dual action therapies that tackle the symptoms of acne whilst preventing disease progression.

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

Results of Competition: Biomedical Catalyst 2017 Round 1 - Feasibility Studies

Competition Code: 1701_FS_HEAL_BMC2017_ISCF

Total available funding is £743,442

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

Cambridge Bio-augmentation Systems Ltd Automated remote monitoring of lower limb disorders to improve treatments and rehabilitation outcomes £98,540 £68,978	Participant organisation names	Project title	Proposed project costs	Proposed project gran
		lower limb disorders to improve	£98,540	£68,978

Project description - provided by applicants

Cambridge Bio-Augmentation Systems (CBAS) is an award winning start-up, specialising in interfacing technologies for the integration of medical devices with the body. CBAS are developing a continuous remote monitoring system for use with medical devices, such as orthoses or prostheses, to enable real-time, remote assessment of activity, biomechanics and clinical mobility metrics, which will inform/justify treatment decisions, and correlate patient reported outcomes with prostheses and orthoses designs. Current clinical assessment is restricted to one-off hospital/healthcare visits or subjective patient questionnaires. In this respect, objective remote treatment monitoring systems are set to be an integral part of future healthcare strategies. This project will explore the commercial and technical feasibility of a continuous remote monitoring system for use with orthoses and prostheses prior to committing to a full programme of research and development.

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

Results of Competition: Biomedical Catalyst 2017 Round 1 - Feasibility Studies

Competition Code: 1701_FS_HEAL_BMC2017_ISCF

Total available funding is £743,442

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
	AI and predictive health analytics to identify the underlying causes of mental and physical illness	,	£50,607
Draiget description provided by applicants			

Project description - provided by applicants

Within occupational health, there has been a recent shift in focus from physical hazards in the workplace to the impact of the psychosocial work environment on health. Evidence suggests mental health underpins physical health; however, this is under-recognised, under-reported and treatment protocols are lacking. The impact of the environment, particularly the work environment on mental health is also increasingly recognised. There is a lack of affordable resource available to assess, in combination, both mental health and physical health, explore their inter-relationships, and relate these to underlying causes. Praxis Medicare has developed an advanced cloud-based health risk analytics programme (Praxis RISK) in partnership with IBM Watson. Praxis widens the spectrum of health risks to include mental health and physical health risk and relates these to the underlying behavioural and environmental causes. This project seeks to explore the feasibility of adapting the Praxis programme for the underserved SME corporate health market, addressing the growing problem of presenteeism (where workers are present but non-productive) and sickness absence related to both mental and physical health.

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

Results of Competition: Biomedical Catalyst 2017 Round 1 - Feasibility Studies

Competition Code: 1701_FS_HEAL_BMC2017_ISCF

Total available funding is £743,442

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	
Mirada Medical LtdCommercial Feasibility of Deep Learning based Medical Image Registration£94,587£56,530				
Project description - provided by applicants				
Various methods of imaging are used within medicine to provide different information for the diagnosis and treatment of various diseases. Image				

Registration is a valuable tool that establishes an alignment of images to one another and, as a result, permits meaningful comparison and visualisation of multiple images. For example, a patient'™s response to treatment can be assessed by overlaying (fusing) images captured before and after treatment. Alternatively, anatomical and functional information can be displayed together, providing more information than if the two were viewed separately. For these uses and many others, such as automated quantification of certain statistics, an accurate registration is clearly important. While a number of registration schemes are currently available for use in clinical routines, this project aims to develop a new and more effective scheme.

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

Results of Competition: Biomedical Catalyst 2017 Round 1 - Feasibility Studies

Competition Code: 1701_FS_HEAL_BMC2017_ISCF

Total available funding is £743,442

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		
Relative Health LimitedRHIP - Relative Health Information£199,931£139,952PortalPortalPortalPortal					
Project description - provided by applicants					
As the aging population increases, the financial strain on services will only increase. RHIP aims to provide a solution to the problem of developing					

a private healthcare model for families where the main current wage earner is supporting their children, whilst also looking after their parents simultaneously. We know these people as the 'æsandwich generation'. Typically Generation X's, these people are now faced with growing commitments to family members both older and younger. This trend will only continue as more Baby Boomers retire without significant savings to carry them through their retirement, which will be compounded by extended life expectancy. The Relative Health business model is built on using unique technology to sense the physiological performance of the aging generation and to route this data on a daily basis back to the cloud, where weekly reports can then be sent to the child of the user for their peace of mind and analysis. RHIP is a development project looking to build on our already extensive works with regards remote monitoring of the aging population. RHIP develops new human computer interfaces for monotoring healthcare and provides new machine learning algorithms for health/welfare analytics based on multi modal physiological monitoring.

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

Results of Competition: Biomedical Catalyst 2017 Round 1 - Feasibility Studies

Competition Code: 1701_FS_HEAL_BMC2017_ISCF

Total available funding is £743,442

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
BfB Labs Ltd	Immersive gaming to better treat	£99,841	£69,889
Shift Foundation	anxiety in young people	£31,786	£31,786
University of Nottingham		£12,276	£12,276

Project description - provided by applicants

Anxiety disorders are the most common mental health disorders in childhood, and untreated childhood anxiety can have a significant impact on employment, income and relationship stability in adult life. Cognitive behavioural therapy is a well-evidenced approach recommended for treating anxiety in children, but it is expensive to deliver, and patients often face long waiting times for treatments. Additionally, children who do receive treatment often do not benefit as much as they could because they do not attend all their therapy sessions and/or do not do the homework exercises that are an important part of the therapy. The purpose of this research is to investigate whether immersive videogames using technologies such as virtual or augmented reality or biofeedback, can be used to provide managed exposure to anxiety triggers (a key aspect of treatment for anxiety). The project aims to combine the latest understanding of anxiety management in young people with what BfB Labs has learned about creating engaging and immersive games to develop a new anxiety management product - fun to use, with high adherence, with evidence base to support use alongside therapy.

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

Results of Competition: Biomedical Catalyst 2017 Round 1 - Feasibility Studies

Competition Code: 1701_FS_HEAL_BMC2017_ISCF

Total available funding is £743,442

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	
Thalamus Al Ltd	A Deep Learning Algorithm To Eliminate Errors During Fractional Flow Reserve	£127,844	£89,491	
Project description - provided by applicants				

Fractional Flow Reserve (FFR) is a leading innovative technique for diagnosing narrowings in the coronary arteries, a problem that leads to an impeded oxygen supply to the heart muscle causing severe chest pain, which can lead to heart attack and death. Last year there were 500,000 FFR procedures. Of these, studies suggest that due to measurement errors, up to 30% were performed incorrectly, leading to unnecessary treatments and increased mortality and morbidity rates. These errors occur due to the subtlety of the readings and even experienced FFR experts can make mistakes or miss key information. We are developing a deep-learning algorithm that will alert doctors in real-time if measurement errors are occurring. It is grounded in our industry expert's years of expertise and research in coronary physiology, and our team[™]s AI expertise. If successful, this will change the clinical outcomes of up to 150,000 patients per year. Building such an algorithm is highly innovative and challenging. The learnings and techniques we develop from this algorithm will lay the groundwork for us to attack other similar problems within cardiology and the wider realm of medicine itself, and potentially save millions of lives over the next 20 years.

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

Results of Competition: Biomedical Catalyst 2017 Round 1 - Feasibility Studies

1701 FS HEAL BMC2017 ISCF **Competition Code:**

Total available funding is £743,442

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	
Pharmatics Limited	AiCOPD: Artificial Intelligence for treatment and management of COPD	£171,048	£119,734	
Project description - provided by applicants				

Froject description - provided by applicants

The frequency of long-term illness worldwide is set to double by 2030, putting a strain on healthcare providers. In some settings, telehealth-based chronic disease management technologies were reported to have remarkable success a solution to this problem. However, other major trials suggest that there is no convincing evidence showing that telehealth saves resources or improves quality of life, as the currently used algorithms often cause an increased workload through generation of multiple false alerts. This was shown for Chronic Obstructive Pulmonary Disease (COPD), which is one of the major causes of emergency admissions and mortality in the UK. More effective approaches to treatment and management of chronic conditions are urgently needed. The aim of our project is to investigate feasibility and potential of artificial intelligence (AI) algorithms for improving care, treatment, and management of COPD, using predictions of future exacerbations and hospital admissions to enable pre-emptive actions before a patient has an emergency. Although initially exemplified by COPD, we envisage that our Al-powered intelligent telehealth platform will be able to adapt to other chronic diseases, as well as the needs of patients with multiple diseases and comorbidities.

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

Results of Competition:Biomedical Catalyst 2017 Round 1 - Feasibility StudiesCompetition Code:1701_FS_HEAL_BMC2017_ISCF

Total available funding is £743,442

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
Outcomes Based Healthcare Ltd	Real World Outcomes	£148,856	£104,199
Project description - provided by appli	icants		
Real World Outcomes' : Feasibility study explo to measure their impact on people, through re outcomes, using retrospective and Real World	al-time, population-level outcome	measurement. Understanding which se and stratified approach to treatme	interventions impact people's

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