

Innovate UK

Results of Competition: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Payfriendz Limited	Payfriendz - unlocking E-Money-as-a-Service for the global SME market	£962,334	£673,634
Project description - provided by applicants			
<p>Payfriendz Ltd. is a London based company operating in the wider Financial Services sector and leading the FinTech market by investing in innovation and talented people. The company is driven by the goal of democratising access to financial services by developing in-demand and useful technology to consumers and businesses. Payfriendz currently operates a leading mobile application providing E-money wallets that has processed over £4m in 365,000 transactions in the UK alone. The app combines secure E-money services with a chat function that meets the demands of the millennial market that is connected, mobile and online. The evolution of the current Payfriendz platform is EMaaS – E-money-as-a-Service – a business to business version of the E-money platform. This will enable other businesses around the world to easily integrate financial infrastructure into their existing products by using Payfriendz’ innovative and affordable E-money platform. Payfriendz is ambitious and is looking to create a £100m revenue business within the next three years. To achieve this, the company will need investment, talented people, cutting-edge technology and to keep listening to its customers.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Scannerfutures Ltd	STREAM: STROke detection by Electromagnetic Analysis at Microwave frequencies	£216,857	£151,800
Project description - provided by applicants			
<p>Strokes are the 4th highest cause of death and the highest cause of long-term invalidity in the UK. ~110,000 people experience a stroke each year and ~1M people are already living with the consequences. The treatment and rehabilitation for these patients, including the loss of productivity in the work place, costs the NHS and UK economy ~£10bn annually. This project is aimed at developing an innovative new medical scanner that will help to greatly improve these statistics. It uses low intensity radio frequencies to determine whether a stroke has occurred and its low cost, compact and readily portable construction means that it can be widely deployed in hospital emergency departments at a considerably lower cost compared with X-ray CT incumbents. This will help to greatly reduce the waiting times that stroke patients typically endure before they can be scanned and a diagnosis made. These same attributes will enable the new scanner to be carried in ambulances and first responder vehicles and used on-scene, thereby avoiding the delays involved in transporting the patient to a hospital for an X-ray CT scan. The new scanner can also be deployed in care homes for the elderly where there is a localised population at an increased risk of stroke. Crucially, this scanner will enable an increased percentage of patients who present with stroke-like symptoms to be assessed, diagnosed and initial treatment administered within the 'golden hour': the first hour after the onset of their stroke. This will significantly improve the outlook for these patients which in turn will help to reduce the annual ~£10bn cost to the nation for strokes.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Block Dox Limited	Block Dox	£257,179	£180,025
Project description - provided by applicants			
With implications for space optimisation, operational cost reduction, H&S, & energy performance (buildings accounting for ~40% of total energy use, with a significant part of this energy wasted in servicing unoccupied buildings), having accurate knowledge of localised occupancy information is critical to smart intelligent building strategies. Despite representing the primary challenge facing all building operators & facility managers obtaining a precise and reliable measurement of occupancy remains difficult based on current solutions, the impact being that most buildings are inefficiently managed with poor energy performance. BlockDox offers an interoperable platform that can be integrated into any Building Management System. It combines a patent-pending sensor fusion method with unique machine & deep learning algorithms to deliver an accurate assessment of real time & predictive people counting/flow. The solution addresses an unmet market challenge with 99% accuracy with the potential to deliver up to 56% Heating, Ventilation, and Air conditioning (HVAC) savings, improved staff resourcing/use of floor space, improved security implications incl. crisis management. Potential for the solution to be applied to other sectors including Transport, hospitality & healthcare			

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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Petalite Limited	Sinusoidal DC Supercharging - A technology platform to revolutionise electric vehicle charging	£186,485	£130,540
Project description - provided by applicants			
<p>Electric vehicles are central to the UK target of zero tailpipe emissions by 2050. However, incremental improvements to battery capacity cannot address power requirements (>1.2kWh/km) in demanding applications such as logistics, mass transport and aviation. Electrification of mobility in demanding applications is therefore critically dependent on capability to safely and rapidly supercharge high energy (>40kWh) batteries to full capacity in <15 minutes. Existing charging technologies cannot meet this need and are fundamentally limited by the continuous rate at which current can be forced into a battery against the internal electrochemical impedance of each cell. In response, Petalite Limited have developed and patented a new technology platform – Sinusoidal DC Supercharging – which radically reduces cell impedance and temperature using a time-varying current to the battery, synchronised with the AC grid. PL now seek to realise a scalable solution enabling adaptive supercharging of high power multi-cell Li-ion battery packs in less than 15-minutes, targeting electric mobility and EV applications with a step change in function, performance, safety, complexity, reliability and cost. Sinusoidal DC Supercharging can therefore be a transformative platform technology enabling electrification of mobility in demanding 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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Kool Zone Limited	KoolZone	£352,642	£158,688
Project description - provided by applicants			
<p>Over a million food poisoning cases are diagnosed/y in the UK, 500 resulting in death(1) with more than 500K cases arising from known pathogens(2). Yet research estimates that 10 million incidents of infectious intestinal disease (IID) /y are not yet attributed to a specific pathogen(3)Food temperature monitoring in commercial sectors is mandatory in the UK, EU, US, Far East & Australia where HACCP compliance is used to safeguard food safety. The majority of monitoring uses manual records due to high cost (£500 hardware only) & complication of retrofitting automated logging &/or more efficient control. Increased power consumption is a consequence of commercial refrigeration operators over-cooling to avoid bad press & litigation from ill customersOur focus is to create a disruptive very low cost (£5/month) complete refrigeration monitor and reporting system (inc. SaaS) for <30% of competitors' up front hardware cost, whilst removing all on-site integration costs through use of plug&play wireless battery- powered automated refrigeration monitor with data transfer via IoT (& SaaS). We've developed a concept with key innovations (rationalising sensor design, extending battery life & Sub GHz RF transmission from inside fridge) so that temperatures are more accurately maintained (+ energy efficiencies increased radically) whilst the mandatory HACCP reporting is produced automatically with ease. Saving a single life through food poisoning reduction would be considered a success for this project</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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 Plastic Economy Ltd	Market feasibility study for a novel 3D-printing module	£50,008	£35,006
Project description - provided by applicants			
3D printing or additive manufacturing is a process of making 3D solid objects from a digital file. In an additive process, an object is created by laying down successive layers of material until the object is created. The 3D printing industry is growing at it's faster ever rate (31.6% CAGR) and is expected to exceed £16 billion in worldwide revenue by 2020. The Plastic Economy is seeking to unlock the true potential of 3D printing with sustainable manufacturing applied to high value products. In order to exploit our technology and gain a foothold in this rapidly developing, high-growth market, we will: 1) Undertake a market feasibility study to identify high-value applications and relevant market sectors 2) Develop user-cases and showcase our technology in specific high-value applications 3) Establish partnerships and negotiate commercial agreements for route to market			

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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Bright Structures Ltd	EasiBridge - Man-Portable Bridging, Conveyor & Associated Systems EasiBridge & EasiShift- Experimental Develpt.EasiRoof, EasiFrame, EasiBarrier Market Feasibility Assessments.	£99,713	£50,006

Project description - provided by applicants

EasiBridge® is a lightweight bridging system offering man-portable spans up to 55 feet, with weights less than 1kg per foot of span. A 50 foot bridge weighs less than 50 kg - half the weight of incumbent systems. The bridge sustains a design load of 250 kg. Bridging systems are based on short module lengths for easy pallet storage and transportation. Structures can be installed rapidly, without detection or heavy plant. EasiBridge® systems are 20 times stiffer, half the weight, and offer treble the span range of the Army's current gap-crossing system. Bridges are designed to sustain personnel & quad-bike loading on a "rigid" superstructure. A 50 foot gap can be crossed in less than 5 seconds. EasiBridge® offers multi-functions, including: a) A rescue, or military assault platform for urban environments – rooftop-to-rooftop, or through windows. b) A gap-crossing system for infantry soldiers - designed for quad-bike loading. c) A ladder to climb walls (climbing heights up to 40 feet) d) A materials handling (EasiShift®) conveyor & adaptation to form EasiRoof® trusses (military & civilian). e) MEDEVAC stretcher for casualty evacuation. The EasiBridge® system is further adapted to form related products: EasiFrame - disaster-relief and troop accommodation shelter and EasiBarrier® - portable, rapid-assembly flood defence barrier. All systems are man-portable. EasiBridge® and associated products all do not require plant or power to operate, or install.

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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Andrew Lucas Limited	Immersive cross-platform augmented and virtual reality architectural design experiences	£510,051	£229,523
The Charlton Brown Partnership		£92,270	£41,522
Project description - provided by applicants			
<p>Growth in the augmented and virtual reality (AR/VR) technology market with the launch of several mainstream VR headsets, will change the way we interact with the world, both in real-life and digitally. This will create new opportunities for technology providers, App developers and content creators in both consumer and professional markets. Building design and property development are highly visual trades that traditionally rely on 3D designs, renders and flythrough videos during the design and construction phase. This project aims to develop an innovative and hardware agnostic platform to enable VR/AR to become a ubiquitous presence in the offices of designers and property developers. The project builds on the expertise of Andrew Lucas Limited in VR content optimisation, workflows and graphical manipulation techniques to progress beyond the current state-of-the-art in immersive VR design experiences. The hardware agnostic platform will allow architects and design professionals to turn their 3D designs and renders into VR experiences that can be shared, viewed and edited in real-time by designers and their clients across platforms and devices. This will add socio-economic value to building projects, increase client engagement, improve design and build processes, reduce design uncertainties and avoid costly mistakes. The Charlton Brown Partnership of architects will trial the technology during the project giving real customer perspectives and active participation of end-users in technology design and development, and ensuring the solution is developed with end-users in mind.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Rosehill Polymers Ltd	The development of an innovative vehicle security barrier system	£528,712	£185,049
Project description - provided by applicants			
<p>Terrorism is a significant threat to the UK, Europe and wider world, which shows little signs of abating. In response to recent vehicle attacks on 'urban soft targets', civil protection authorities are seeking improved safety measures. Soft targets can be described as members of the public who are exposed to increasing security threats within an urban area into which large numbers of citizens are freely admitted e.g. celebratory events, markets, concerts, sports events etc. In NaCTSO latest guidance, robust physical barriers to keep all but authorised vehicles at a safe distance have been highlighted as a main protection measure. Rosehill Polymers has developed the Impakt Defender: a highly innovative physical security system designed to protect people, buildings and infrastructure from hostile vehicle attack. Requiring no foundations, the surface mounted system can be rapidly deployed as a temporary or permanent security measure. The innovative system, manufactured from recycled rubber, is significantly lighter than competing VSBs. Its unique design means it does not require foundations or ground fixings, yet provides excellent impact resistance and is capable of bringing to a stop a heavy vehicle travelling at 48km/hr. Rosehill develops engineered rubber products and systems. Their range of innovative systems include the Anti-Trespass Panel (ATP), which is used to deter access to prohibited areas and is exported all over the world.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
York Probe Sources Limited	Affordable cryo-EM (FEG-TEM Upgrade)	£261,366	£182,956
Iss Group Services Limited		£5,665	£3,966
Project description - provided by applicants			
<p>YPS intends to develop a purpose built upgrade solution for a thermionic based transmission electron microscope (TEM). This product will utilise a field emission source at an electron energy of 100 keV that will improve the source brightness by at least 500x. This will allow users who are unable to afford a high-end cryoEM the opportunity to extend the capabilities of their existing instruments at a fraction of the cost of a high-end TEM. YPS will partner with the world-renowned Medical Research Council Laboratory of Molecular Biology (MRC-LMB), which has a large concentration of cryoEM users and expertise and who will guide the overall development. This involvement will ensure that the needs of end-users for such technology are adequately met. Equally as important, their involvement will serve as a means to validate the developed technology. YPS specialise in the manufacture of field emission electron sources (thermal and cold type), which it distributes world-wide, and the development of novel solutions for high-end electron microscopy. In addition, YPS also manufacture field emission guns (FEG), high voltage EHT units and feedthroughs for electron beam based instruments. YPS has successfully developed and demonstrated technology to upgrade thermionic-based scanning electron microscopes (SEMs) to FEG types, thus significantly improving their resolution and low voltage operation which is useful to use in the inspection of radiation sensitive and nanotechnology materials.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Advizzo Limited	Prevention of sewer blockages and water utility debt using predictive analytics and behavioural science	£195,262	£136,683
Project description - provided by applicants			
<p>Affordability of water is now a growing concern for many people in the UK; a recent Ofwat report has shown that unpaid water bills are an increasing problem in the UK with £2.2bn unpaid revenue now outstanding. In order to meet the challenging targets set by Ofwat to reduce water bills and improve affordability, water companies must take advantage of new technologies to improve efficiency of the industry as a whole. Advizzo Limited has identified that two of the biggest problems faced by the water industry (consumer debt & pipe blockages) can be alleviated by exploiting unutilised big data to gain behavioural insight, inspire consumer behaviour change and ultimately cut costs. Technological solutions to these problems are limited; water companies currently rely on untargeted letters posted/e-mailed out in high volume to educate consumers, no UK centric software exists to address consumer utility debt and pipe blockages are typically detected using CCTV which is labour intensive. Advizzo will advance on state of the art by using an entirely disruptive software only approach which feeds a unique big data set into a novel machine learning algorithm, to produce tailored behavioural intervention material for consumers. This project is expected to: decrease debt by 20% - 40% with an expected knock on impact of £4 to £9 to each household water bill; and reduce pipe blockages by ~30% leading to a cost saving of ~£24million p.a. KEY WORDS: BIG DATA, MACHINE LEARNING, UTILITIES</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Zenotech Ltd	Z-CARS	£78,770	£55,139
Project description - provided by applicants			
UK based automotive manufacturers make use of computational aero-acoustics (CAA) analysis to design for quieter, greener and more driver-friendly vehicles. Full CAA simulation is costly – both in terms of license fees and computing hardware. Newly developed high order flux reconstruction (HOFR) capability in the zCFD software from Zenotech, based on fundamental research work at Imperial College, offers a route to faster and more efficient CAA. Z-CARS will demonstrate this in partnership with industry specialists, including a UK premium sports car manufacturer. The outcome will be an enhanced CAA capability, available for use in automotive, aerospace, civil, maritime and renewables engineering. ZCFD is freely available for academic use and to anyone on a single device. ZCFD can be accessed online, on-demand worldwide via the EPIC portal to high performance computing (HPC) resources.			

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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Fetu Limited	The FeTu roticulating concept - air compressor/supercharger feasibility study	£279,251	£195,476
University Of Bath		£119,426	£119,426
Project description - provided by applicants			
<p>FeTu Limited are the creators, IP owners and developers of the FeTu 'Roticulating' system. The FeTu principle consists of an entirely novel & disruptive four chamber '2 moving part' mechanical device capable of low-loss energy conversion between volumetric and rotational energy sources. Such purports to a lightweight, compact, resilient, power dense, unit; targeting drastic carbon reduction by surpassing the efficiency of the current state-of-the-art, engines, turbines, pumps, compressors and expanders. Directly targeting 'significant' cross platform carbon reduction by enabling us to produce more & use less 'energy'. FeTu can simultaneously perform (up to triple ratio) compression and expansion functions and seemingly be able to run any thermodynamic cycle (open or closed loop). A 'positive displacement low-velocity turbine', FeTu is somewhat a hybrid between a turbine and piston engine, combining the best of each into a simple, reliable, scalable, sumless, unit; offering very linear, uniform and uninterrupted media flow. We seek to overcome some moderate design challenges, being ready to build & test a 'compressor' variant, with all validation directly transferring to its very exciting potential to transform the efficiency and cleanliness of the entire energy sector. Ultimate highlights are our goal to double the efficiency of a pump fuelled vehicle and to provide a closed loop system for ultra-efficient, grid, domestic and portable electrical power generation from a range of heat sources (including solar).</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Crypta Labs Ltd	Miniaturised Quantum Random Number Generators for Secure IOT and Mobile Applications	£43,865	£30,706
Project description - provided by applicants			
<p>Random numbers are a critical component of encryption / cybersecurity & currently rely heavily on Pseudo Random Number Generators (PRNG). These algorithms are deterministic & vulnerable to hacking. In particular, an eavesdropper obtaining the initialisation settings can predict all possible outcomes, thus compromising the entire encryption. We are currently in the middle of two key global, interconnected trends, increasing interconnectivity of our devices (IOT) & accelerating rise in frequency & impact of cybercrime. Both trends illustrate the critical importance of proper security for devices & communications. An effective way to address the problem is to use Quantum Random Number Generators (QRNG). The inherent entropy at the core of quantum mechanics makes quantum systems a perfect source of randomness. However, existing QRNG technologies are large, expensive and only useable in static environments e.g. server farms. Whilst strong protection for 'the hub' is crucial, these solutions are not suitable for 'the spokes'. Crypta Labs is developing QRNG products which can provide miniaturised, end-to-end encryption without reduction in device speed / encryption rates, another key parameter for QRNGs as the amount of data being generated & transmitted is increasing exponentially.". Funded by DSTL & Innovate UK, Crypta Labs has already developed a working QRNG prototype. Example use cases include finance, healthcare, military communications, transportation & critical. This project will assess the market for QRNGs providing input to R&D, market strategy and fund raising.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Phico Therapeutics Ltd	Phase I Clinical Trial of novel antibacterial agent, PT3.9, against <i>Pseudomonas aeruginosa</i>	£999,856	£699,899
Project description - provided by applicants			
<p>SASPject™ PT3.9 is being developed as an antibiotic which can treat infections due to the bacterium, <i>Pseudomonas aeruginosa</i>, in particular <i>P. aeruginosa</i> pneumonia in hospital patients. <i>P. aeruginosa</i> infections can involve any part of the human body, but most commonly cause urinary tract, lung, bloodstream, wound/burn, and intra-abdominal infections. It is responsible for a number of hospital-acquired infections with its incidence in intensive care units having risen sharply and its incidence almost doubling between the mid 1970's and early 2000's. The increasing incidence of <i>P. aeruginosa</i> strains showing resistance to multiple antibiotics, including commonly used first-line antibiotics has resulted in the U.S. CDC (Centers for Disease Control and Prevention) classifying <i>P. aeruginosa</i> as a serious threat to human health. In the laboratory, PT3.9 has been shown to be effective against a wide range of <i>P. aeruginosa</i> strains and it is now ready to be tested in the clinic. The aim of this project is to investigate the safety and tolerability of PT3.9 when administered to healthy volunteers. Initially subjects will receive a single ascending dose and ultimately multiple ascending doses (twice daily for 5 days) of PT3.9, confirming the safety and tolerability prior to each dose escalation.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Iproov Limited	DEPALMA - DEep learning PALm Mobile Authentication	£280,388	£196,272
Project description - provided by applicants			
Project DEPALMA aims to reasearch and develop a completely new set of methods for authenticating users to assure their cyber-security. Leveraging its recently-granted patent on spoof detection, iProov will seek to apply this patent to a new biometric, overcoming several severe technical challenges in the process. To accomplish this, iProov will apply the latest techniques in machine learning and computer vision to a context in which these have not been used before. The outcome will be a proof of principle prototype demonstrating the feasibility of this new technology, paving the way for its engineering for production and launch for use by the public.			

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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
E Fundamentals (UK) Ltd	The Real Time E Fundamentals Pharma Solution - a novel approach to addressing the sale of SFFC products	£320,335	£224,234
Project description - provided by applicants			
<p>Internet-based sales of pharmaceuticals are a major and growing source of counterfeit medicines. Whilst some Internet pharmacies are legal operations, set up to offer convenience, of the estimated 35K websites selling prescription drugs globally, 96% fail to adhere to legal and safety requirements with more than 50% of the drugs for sale online recognized as fake products. Such products present a significant Global public health threat contributing to illness, death, toxicity, and drug resistance, and it is a market challenge that Pharma companies and regulatory authorities are failing to address. The key to addressing this global challenge is greater intelligence around the identification and evaluation of sites selling counterfeit products and it is this need that E Fundamentals (EF) will address through the development of a disruptive approach that will</p> <ol style="list-style-type: none">1. Identify sites selling drugs online across surface/deep web sites in real time to deliver insights around core products, target geographical markets, domain details including Geolocation, site visitors2. Evaluate the legitimacy of products3. Presentation of the data in real time to enable informed action to be taken. <p>If successful, the solution has the potential to address a key public health challenge and create an export product with significant growth potential. The product could also be applied in the future to wider Ecommerce for counterfeit product detection with 1 in 6 products sold online recognised as being counterfeit.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Exabre Limited	Dynamic Automated Predicted Segmentation	£361,348	£162,606
Project description - provided by applicants			
<p>The online retail sector is the main driver of growth in European and North American retailing, achieving in Europe growth rates of 18.4% (2014), 18.6% (2015) and expected rates of 16.7% (2016) and 15.7% (2017). In comparison, the annual growth rates for all types of retailing range between 1.5% and 3.5% pa. The key metric of e-commerce effectiveness is 'Customer Lifetime Value' which calculates the mean revenue per customer over a defined period of time. A 2015 survey by RJMetrics showed a mean CLV-365 of \$154. The aim of the Dynamic Automated Predicted Segmentation is to apply Machine Learning algorithms to improve the average CLV uplift to 30% when compared to the capabilities of existing (average +5%) best-in-class product recommendation techniques. If such uplift is achieved, then customers will ultimately see revenues lifted in excess of this as a result of the collateral referral and brand kudos benefits. The benefits from this unique approach are that Customers/Clients of the Merchandising Platform will: a) Receive increased revenues from each consumer, get a better purchasing experience for each consumer and make better use of their product range thereby reduce stock requirements/costs; b) Reduce consumer's wasted time, working through irrelevant information and so have a higher repurchase frequency; and c) Experience increased consumer loyalty and referral rates, improving the cost effectiveness of customer acquisition activities ultimately resulting in more rapid growth in active customer base and improved competitor differentiation.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Upgrade Technology Engineering Ltd	Multi Chemistry Battery System	£62,798	£43,950
Project description - provided by applicants			
The search for power pack solutions for Electric Vehicles (EV's) or Hybrid Electric Vehicles (HEV's) has led to many advances in cell technologies and techniques, aided also by the goal to provide viable storage systems for renewable energy sources such as wind and solar. Revolutions in cell technology have only been half the battle though, invariably the difference in real life performance of automotive battery packs to that of the manufacturers advertised performance can show a reduction of typically between 60 -70% of the practical travelling distance of the vehicle. The other half of the battle is therefore to provide a means of not only increasing the real life performance of a battery pack with the current cell technologies, using advanced multi chemistry management techniques, to provide reliability, longevity, a reduced cost, increased safety and extended performance.			

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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Smart Sail Systems Ltd	Smart Sail	£500,501	£225,225
Southampton University		£106,126	£106,126
Project description - provided by applicants			
<p>The owners of sailing boats, whether individuals with one boat, fleet owners, racers or those who maintain boats, face two key problems with sail management namely condition monitoring and finding and identifying sails when in storage. Sails can range in value up to £100k and it is critical that the correct sails with sufficient service life are selected for the sailing yachts itinerary be it racing or cruising. Yachts can have many different sails which are frequently moved between storage and yacht and their inventory is invariably managed with hand written lists or at best with spreadsheets that are manually updated. Furthermore, data of sail usage is rarely if ever recorded and such data would be kept in an on-board written log and not held in a central accessible database. The degradation sails experience due to UV exposure and “flogging” (the damaging flapping of sails that occurs whilst tacking or gybing or if they’re incorrectly set) is never recorded and there is no known method of monitoring this. Smart Sail Systems has developed and tested an innovative new sensor fixed to the sail that records the sail “passport” and monitors and stores sail use and wear enabling users to accurately record and review the usage of sails for the first time. We propose to commercialise this technology and to develop a fully tested, validated and calibrated prototype for launch in the market</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Gibson Technology Limited	ARG - A lightweight, highly compact, high power to weight ratio, low cost, 10kW military auxillary power unit	£153,939	£92,363
Project description - provided by applicants			
<p>In combat situations, access to electrical power is a major logistical challenge with many military resources powered by electricity; from cell phones, computers and communications systems to surveillance equipment and low-level lighting. According to the Defence Science Board's task force on energy strategy, standard generators are the single largest users of fuel on the battlefield. Existing military generators are large, heavy, noisy, fuel inefficient and expensive to run. This makes generators undesirable as auxiliary power units, whilst their weight makes them difficult to manoeuvre, leaving expeditionary forces with limited options when operating in remote and austere environments. The military market dictates that mobile/remote electrical power incur the minimum size and weight penalties possible, without compromising on efficiency or increasing fuel cost. Through a previously successfully completed, Innovate UK funded, Proof of Market study, Gibson Technology & Ricardo identified the desired operating parameters, market opportunity, expectations, route to market & relevant standards within the Defence sector. This project will prove the concept of a kerosene JP-8 fuelled, highly compact, lightweight, high power to weight ratio, low external signature, low cost 10kW Advanced Rotary Generator. Such disruptive product will provide a solution of unequalled performance compared to existing state of the art auxiliary power units and will lead to considerable improvements in operational capacities.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Cnr Services International Ltd	Miniature Aircraft Seat Actuator (MASA)	£98,454	£68,918
Project description - provided by applicants			
CNR Services International Ltd delivers leading-edge engineering design services to a wide range of industry sectors from concept generation and development, through integration into the manufacturing process. CNR recently designed a self-contained miniature actuator for a specific aerospace customer application which delighted said customer by exceeding size, mass and performance expectations. Given that experience, CNR is confident that it is now able to develop a significantly smaller, lighter and higher performing self-contained electro-hydraulic actuator given a fresh piece of paper from which to start. This presents a significant commercial opportunity in aircraft actuation and will generate significant foreground IP for CNR, grow its business substantially and create high value UK jobs. This product is expected to provide cheaper manufacturing costs per actuator, lower mass, more reliability, greater efficiency and quieter and smoother performance than current state-of-the-art actuators. There is tremendous opportunity to further broaden the markets of this product outside of aerospace.			

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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Diagnostics For The Real World (Europe) Ltd	Proof of Market and Feasibility Study for Point-of Care SAMBA Respiratory Multiplex Test	£237,398	£166,179
Project description - provided by applicants			
<p>Respiratory infections cause around 4.25 million deaths worldwide every year. In the UK, many patients visit their GP for a suspected flu infection and large numbers are hospitalised. Since a flu infection shares many symptoms with a number of other infections, including the common cold, patients are often treated incorrectly. Currently, there is no simple accurate point-of-care test (POC) that can be used to quickly diagnose infections, and doctors rely on symptoms for diagnosis. The World Health Organisation has listed development of accurate POC tests for respiratory viral infections as a priority. Development of such a test may transform the way doctors assess and treat patients with acute respiratory infections. Rapid diagnosis of the virus causing the respiratory infections would allow the correct treatment to be administered, thereby reducing morbidity and mortality in at-risk groups, leading to better treatment for patients and resource and cost savings for healthcare providers. However, before such a test is developed it is critical that diagnostic manufacturers understand the clinicians requirement for the test. The objective of this project is to 1) generate understanding of the market for a POC test to diagnose respiratory infections by determining the clinical and health economic requirements and 2) determine the feasibility of developing the test for use on DRW's CE marked SAMBA platform. DRW will use this information to inform the development of, and reduce the financial risk of, developing an innovative multiplex diagnostic POC test for the diagnosis of respiratory viral infections.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Genco Ltd	IC Nano, Nanotechnology Enabled Infection Control	£99,283	£69,498
Project description - provided by applicants			
<p>Hospital acquired infections (HAI) are so common that they are almost expected to occur by members of the public. Fighting such infections is becoming ever more difficult as the resistance to antibiotics increases. HAI increase treatment times and in extreme cases lead to the death of a patient (~1000-2000/year in England). Typically the microbes that cause such infections are transmitted by touching a contaminated surface, or being touched by a contaminated surface. In England the cost of treating patients infected whilst they are in a hospital is £1 billion. Hospitals are cleaned very well however it is impossible to remove 100% of the harmful bacteria. Surface materials such as stainless steel and plastics are an ideal home for bugs. It is possible to apply various antimicrobial coating to such surfaces, however these are usually of a plastic nature with an added active ingredient. Until now it has not been possible to coat a surface with a hard, adherent and durable coating which is highly antimicrobial. We have developed such a coating using a technique called physical vapour deposition (PVD). PVD is commonly used in industries such as electronics and food packaging. We plan to develop this coating and apply it to hospital touch surfaces and surgical instruments. We believe that this innovative coating will reduce HAI, save money, and save lives.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Ventive Ltd	Room Temperature Passive Heat Recovery with Heat Pipe	£219,843	£153,890
Brunel University London		£92,146	£92,146
Project description - provided by applicants			
<p>The results of Building Performance Evaluation Program, published by Innovate UK, identified that Schools consume 2 to 6 times more energy than designed. Recent research published by RIBA stated that UK Schools spend over £150,000,000 on energy consumed out of occupied hours, largely due to overly complex ventilation equipment. These findings are reinforced by CIBSE Journal reporting that new schools face excessive energy use, high running costs, poor operational effectiveness, with a large proportion of complex mechanical systems and renewables disabled, unused or abandoned due to the burden they place on the schools budgets and maintenance resources. Both CIBSE and RIBA point to complex mechanical hardware as a key contributor to these problems and the excessive costs involved, all at the time when School budgets are squeezed more than ever. In contrast, the Heat Pipe system designed by Ventive system is not only passive, but also possesses a simple and robust architecture. It can recover heat in winter, help to cool the building in the summer and seamlessly integrate into the building façade would greatly help to address the above reported energy inefficiency and high running costs. Ventive intends to prototype and test this system as part of this project.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Teskalabs Ltd	General-purpose IoT Application Management System	£94,983	£66,488
Project description - provided by applicants			
<p>TeskaLabs is an award-winning mobile application (i.e. app) cybersecurity startup company and their proposed project will address common difficulties and challenges within scaling the industrial IoT application sector. The number of connected devices globally is growing at an astonishing rate and many companies are struggling with managing so many connected devices. Many of the problems and security challenges experienced by many IoT operators and can be managed by TeskaLabs. TeskaLabs plans to provide and manage a reliable, risk-free and secure way of managing fleets of connected IoT devices. Security is of utmost importance and all TeskaLabs technology includes the most up to date protection against cyber-attacks and malware. Teskalabs' IoT Application Management tool will be available to small businesses through to large corporations. Clients will be able to go online and buy the product from the website or by direct sales. Clients will be able to pay on a monthly or annual basis. The company has put in lots of research & continues to improve the technology and services they can provide. They anticipate to increase their workforce to cope with the expansion in sales and the number of customers they will be offering their services to and thus increasing the value of their company and the profits made.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Launchpad Recruits Ltd	Launchpad Predict	£338,559	£236,991
Project description - provided by applicants			
<p>LR is an innovative tech startup based in London that provides video assessment software. Founded in 2012, LR quickly became a leader and a trendsetter in the video interviewing market by implementing proprietary software with reviewing and comparison functionality. Success has come from adapting candidate screening requirements to customer needs and providing a superior candidate experience. The power of video interviewing is in part due to the wealth of potential data from the candidate's' language, presentation, personality and body language, which future software realisations seek to exploit. LR's new project 'Predict' aims to take video interviewing to a completely new level, by developing a predictive video recruitment (PVR) software. The proposed PVR software will be able to automatically predict which candidates meet the performance requirements for a particular role, out of a large pool of applicants. PVR will also be able to prevent interviewer bias and inconsistencies between different human reviewers to make sure that the top talent is identified in a fair manner. This revolutionary screening process is made possible by bringing together a number of cutting edge artificial intelligence technologies. The proposed PVR application has huge potential to become game changing recruitment tool, also applicable in other sectors where screening of large candidate pools is required. In addition the PVR application can save organisations the cost of recruiting poor performers.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Pixelpin Ltd	PixelPin – A Secure 2 Factor Image Based Password System for Enterprise Logins	£481,211	£216,545
Project description - provided by applicants			
<p>In today's digital age, we are becoming increasingly dependent on online services to be accessible across multiple devices. As a result, the security of information is one the key challenges associated with the open digital age, which faces commerce, governments and citizens alike. As company data becomes more valuable and harder to protect, businesses are increasingly looking for secure, single sign-on options for employees to login into computers/tills/other electronic devices directly into private company networks and servers. PixelPin has developed a secure 2-factor sign-on solution on mobile devices, using the specific mobile phone as the 2nd factor to overcome the limitations of current authentication solutions through a patented picture-based approach where users choose a personal image (e.g. a holiday photo) and a four pass-point sequence. This type of sign-in approach has been proven to be easier to learn, quicker to enter & less likely to be forgotten, protecting users against common hacking techniques such as dictionary attacks, social engineering, phishing & keylogging. PixelPin is now seeking to develop novel system functionality to deliver an enterprise solution with using a secure mobile 2nd factor.</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: Open Round 2 Under 12 Months

Competition Code: 1612_EE_OPEN

Total available funding is £15m (for all streams)

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
Simprints Technology Limited	Development of an infant biometric system to solve identification challenges in low-income countries	£550,805	£247,862
Project description - provided by applicants			
<p>With over 1/3rd of births unregistered in developing countries, the lack of reliable infant identification methods is a major bottleneck for governments, aid agencies, and NGOs in the delivery health services (Unicef 2013). The inability to link neonates to a health record means healthcare providers often have no idea if the child has been immunised for things like diphtheria, or has a life-threatening history of anaemia. This bottleneck costs health systems hundreds of millions of dollars a year. Simprints aims to provide a solution to this problem by linking newborns through their fingerprints. While it was until recently thought that no biometric can work for the very young, our research at Univ. of Cambridge & Michigan State has shown it is feasible through innovations in image enhancement, fingerprint matching algorithms, and hardware. The commercial demand for such a technology is huge. The need for infant biometrics include applications in tracking child vaccinations, monitoring immunisation coverage, preventing baby swaps in newborn care facilities, identifying missing children, and preventing fraud in aid or food subsidy programmes. Building from our experience of successfully creating the only biometric system tailored to emerging markets, we propose to research, develop, and validate hardware and software that will allow current and future clients to accurately and securely identify newborns and infants in developing countries, and link them to a permanent record. If successful, Simprints will be the first organisation in the world able to offer this.</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