Results of Competition: UKRI Ideas to Address COVID-19: Innovate UK Article 25 Aug 2020

Competition Code: 2007_UKRI_IDEAS_COVID19_OPEN_ART25

Total available funding is £120m

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
AQDOT LIMITED	Safe and Effective Antiviral Technology for diagnostics and prevention of SARS-CoV-2	£520,892	£364,624
The University of Manchester		£117,701	£117,701
University of Leeds		£80,297	£80,297

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

Project description - provided by applicants
The Covid-19 pandemic has caused extensive health, economic and social damage in the UK and worldwide. As countries reactivate economies, it is essential to reduce transmission risks of bioaerosols in enclosed places (e.g. public transport, workplaces, health, education, and leisure settings) and contaminated soft surfaces (textiles/face masks) using safe disinfection technologies. In response to the Covid-19 crisis, Aqdot (Cambridge-based SME), in collaboration with University of Cambridge has recently demonstrated that its platform technology, AqBit (cucurbit\[n\]urils, CBs), is a unique virucide that inhibits SARS-CoV-2-pseudovirus without harming human cells. The technology, available at multi-tonne scale, is safe for humans and the environment as evidenced in the REACH (100 tonne/annum) registration dossier. The project will be completed in the UK between Aqdot, Dr Sam Jones (cucurbit\[n\]uril understanding and virology expertise) at the Henry Royce Institute, University of Manchester, and Professors Andrew Bayly and Nik Kapur (spray generation, characterisation and development) at the School of Chemical and Process Engineering, University of Leeds. The project will focus on the development of safe and efficacious antiviral spray formulations based on Aqdot's technology to inactivate SARS-CoV-2 in soft surfaces (fabrics) and bioaerosols. The project will deliver comprehensive technical, safety data packages, including AqBit-based formulations, delivery devices specification and virucidal performance validation against SARS-CoV-2\. Scalable product demonstrators will be generated for each application (fabric and airborne virus) using hand-held spray devices for small spaces, and a regulatory strategy will be put in place to ensure quick biocidal registration. Also, the concept of automatic spray devices will be validated for use in larger enclosed spaces. The demonstrator formulation/device combinations will be designed for rapid commercialisation, upon success, as low-cost products providing readily available, affordable solutions to reduce the transmission rates of Covid-19, benefitting individuals and businesses. These products will build societal confidence to "return to normal" in the UK and beyond.

Results of Competition: UKRI Ideas to Address COVID-19: Innovate UK Article 25 Aug 2020

Competition Code: 2007_UKRI_IDEAS_COVID19_OPEN_ART25

Total available funding is £120m

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
TMD TECHNOLOGIES LIMITED	FEUD - Field Emission Ultraviolet Device	£224,863	£134,918
Brunel University London		£224,826	£224,826

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

Project description - provided by applicants
The use of short wavelength ultraviolet light to disinfect surfaces is a well-established technique commonly used to sterilise medical equipment and unpopulated spaces. These light sources are however often bulky, inefficient, contain toxic materials such as mercury, and the light generated can be harmful to human eyes and skin. Using low-cost, scalable materials and processes, TMD Technologies, in partnership with Brunel University London, propose to develop a flat-panel far-UVC source capable of generating light at a wavelength proven harmless to humans, while being efficient against bacteria and viruses including the novel coronavirus (SARS-CoV-2). This device will allow widespread installation in public spaces where pathogen transmission is a heightened risk, effectively reducing the rate of spread and benefiting the national public health.

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: UKRI Ideas to Address COVID-19: Innovate UK Article 25 Aug 2020

Competition Code: 2007_UKRI_IDEAS_COVID19_OPEN_ART25

Total available funding is £120m

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
BALSAMEE LTD	Balsamee Child and Adolescent Mental Health Solution (BCAMHS) The new normal in Covid-19 times and beyond	£154,542	£108,179
Cardiff Metropolitan University		£19,641	£19,641
Cwm Taf Morgannwg University Health Board		£28,282	£28,282

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

Project description - provided by applicants
The New normal Balsamee Child & Adolescent Mental Health Services (BCAMHS) solution is aimed at addressing the challenges faced by the healthcare system by providing a mobile solution for young mental health sufferers to manage their condition at home. Throughout the COVID-19 outbreak, CAMHS patients have been largely deprived of healthcare support which is having a drastic and potentially long-lasting negative effect on their mental health and wellbeing. BCAMHS can address this challenge by providing a complete solution that, not only offers remote monitoring capabilities, but also can enable care teams, the patient and their family to provide continuity of existing treatment plans during the Covid-19 pandemic and beyond. BCAMHS is a fully integrated secure application that integrates multiple remote health monitoring solutions. BCAMHS integrates applications to the stakeholders for instantaneous reporting, feedback, awareness and progress tracking using innovative approaches such as self-monitoring and instant messaging. The solution will enable secure data capture from the patient and their parents such as lifestyle habits, mood questionnaires, medication adherence, parents' reports and patient log keeping. The application will include a task management module managed by the care team to allocate and track progress of tasks agreed for the child's treatment plan. The solution has a secure messaging tool embedded to allow regular contact between the care team and patients. It also provides interactive games to allow for distraction therapy techniques which are usually used during a consultation to manage patient's anxiety and enable dialogue to learn more about the patient's progress.

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: UKRI Ideas to Address COVID-19: Innovate UK Article 25 Aug 2020

Competition Code: 2007_UKRI_IDEAS_COVID19_OPEN_ART25

Total available funding is £120m

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
NEUCRUIT Ltd	Neucruit: Creating a platform to optimise participant recruitment for active COVID-19 vaccine trials, and future clinical and research trials.	£293,434	£205,404

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

Project description - provided by applicants
Clinical research trials protect patients from experimental medical research and ensure that new vaccinations are safe and effective before they're scaled. On average, researchers spend 30% of R&D securing participant recruitment. When the criteria for participation is complex, it can take up to 7 months to find participants (CRM International-2011). Over 86% of clinical research is delayed by up to 6-months due to delays in participant recruitment, translating into even longer delays for patients who need life-saving treatments (Applied Clinical Trials-2004). To understand the nature, effects and suppression of COVID-19, extensive trials are needed. Trials are likely to include vaccinations and asymptomatic patient testing to understand how the disease is spread. There are approximately 150 COVID-19 vaccination trials awaiting testing, requiring on average 650 participants per trial (Harden-2018). Research facilities around the world are attempting to urgently fast-track a vaccine. Access to a network of pre-screened participants will make vaccinations a reality, quickly. Neucruit's innovation combines an optimised platform for managing recruitment of clinical trials, with intelligent algorithms for pre-selection and matching using AI. Neucruit will optimise participant recruitment via a web-based platform, which matchmakes clinical researchers with a large population of patients, and digitalises contact time for risk reduction. In this project we will develop the Neucruit platform to MVP, onboard a minimum 9,000 participants and test our software in three live Phase III COVID-19 vaccination trials.

Results of Competition: UKRI Ideas to Address COVID-19: Innovate UK Article 25 Aug 2020

Competition Code: 2007_UKRI_IDEAS_COVID19_OPEN_ART25

Total available funding is £120m

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
ZEST CONSULT LTD	IntelliSite: enabling safer and more efficient construction through video analytics and machine learning	£190,398	£133,279
COSTAIN LIMITED		£421,160	£210,580
University of the West of England		£220,685	£220,685

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

Project description - provided by applicants
Introduction The COVID-19 contingency has highlighted the urgent need for site monitoring systems that enable measuring relative distances, effectively and accurately, among workers and plant equipment to ensure safe working conditions. Government guidelines have been useful, but they are not sufficient. For example, construction sites and manufacturing facilities have been shut down indefinitely due to large numbers of contagions among workers. The construction output fell by more than 40% in April (Office-for-National-Statistics). This underlines the need for accurate and inexpensive monitor systems that contribute to provide safe working conditions while maximizing throughput and productivity. **Areas of focus** Common camera-based site monitoring solutions focus on detecting damage due to crime and environmental hazards, such as intruders and fires. Other more capable systems enable limited object and change detection. Monitoring approaches that make use of Bluetooth devices as mobile phones and wearables have been proposed as well, but they reliability has not been proven yet (e.g. mobile tracking apps). Moreover, they require additional equipment, which increases costs and makes adoption more difficult. **Innovation** This project proposes an innovative approach to develop the datasets necessary to enhance camera-based monitoring systems so as to improve significantly their current capabilities. This project can potentially deliver a qualitative step on the value that monitoring systems provide. For instance, by estimating activity efficiencies, safe distances, and identifying potential contagions. In addition, this project will provide a solution that will not require specialised equipment and will work similarly to current site monitoring systems. **Urgency** This is a timely project, as it will gather very valuable data on currently active sites during the pandemic to gain insights of how monitoring systems can be used to mitigate disruptions due to future sanitary contingencies.

Results of Competition: UKRI Ideas to Address COVID-19: Innovate UK Article 25 Aug 2020

Competition Code: 2007_UKRI_IDEAS_COVID19_OPEN_ART25

Total available funding is £120m

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
REMARKABLE TECHNOLOGY LIMITED	A Covid-19 solution to address the need for rapid reconfiguration of secure digital connectivity to internet or enterprise networks to enable 'Work from Anywhere'	£662,483	£397,490

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

Project description - provided by applicants
What is Albeego? In today's increasingly connected world there is a constant demand for faster, secure and stable access to the internet or private enterprise networks, especially when on the move. With the business interruption caused by Covid-19 it has become the 'new norm' for some to work from home for prolonged periods of time. The main issue in the past few months has been stability of internet connection and cyber security. Utilising bonded technology, Albeego have created a set of technologies to enable secure and stable access to the internet and create branch office connectivity with a level of security required to connect to office and third party systems. The world relies on wireless connectivity for enterprise and internet networks. However, network connectivity is often intermittent resulting in interrupted voice calls; and further interruption of digital applications such as but not limited to email, webchat, Skype calls, etc. There is a particular issue with connectivity on the move with service loss caused by _cell handovers_. Most connected devices or routers have a _single LTE radio_ to transmit and receive signal from a _single cell tower_. Once this single connection becomes weak and/or lost, the device or router cannot communicate with that _single cell tower_. A common solution has been the use of 'Hotspots' or MiFi, however, this technology relies on a single LTE connection and is prone to service loss. The user can also suffer low connection speeds in areas of poor coverage and connectivity whilst relying on a single VPN also means data security may be compromised. A solution to these problems has been the use of 'Bonding Technology' used within the telecommunications industry since the introduction of data services on mobile phone networks. This technology has evolved with the evolution of mobile networks to today's variants which are optimised for 4G/LTE. We have developed a technology roadmap of solutions to specifically address the aforementioned issues based on _Software Defined Architecture_ delivered by low cost hardware. Simply put, we will commoditise bonding technology for applications in many sectors, such as but not limited to, Business, Industry (Factory in a Box), Government and Blue Light Services.

Results of Competition: UKRI Ideas to Address COVID-19: Innovate UK Article 25 Aug 2020

Competition Code: 2007_UKRI_IDEAS_COVID19_OPEN_ART25

Total available funding is £120m

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
ONE PLAN LIMITED	OnePlan: The Future of Post-Covid Event Planning. Safety, preparation, and a single source of truth for every stakeholder in the event lifecycle.	£313,702	£0

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

Project description - provided by applicants
* The events industry has been shattered from the impact of Covid-19\. Theatres,stadia,sporting tournaments,and music festivals are now anxiously cancelling and postponing events due to safety concerns. Theatres across the UK are being forced to shut down due to lack of income and inability to see a way forward with an income generating audience during the Covid-19 pandemic. * There is no centralised,scalable,integrated planning platform to support the site planning+operations of these events. OnePlan is this platform. It will give event planners a set of advanced integrated social distancing tools combined with mapping,drawing,sharing,collaboration,operational planning and procurement functionality. It will provide end-to-end visibility of the event planning process for all stakeholders with a single source of truth. It is a step change in the site planning and operations of events. A major leap in efficiency,collaboration,cost reduction,safety and security. * COVID - 19 has resulted in a surge of interest in OnePlan and we have now engaged 900 events professionals across 40 countries as a result of the release of our prototype social distancing tools,and webinar demonstrations. We conducted surveys across the entire group,holding discussions with key organisational personnel to understand need. As an example we spent 2 days in meetings with the Glastonbury Festival team. * Prior to the Covid-19 pandemic we conducted 12 months of in depth industrial research across our full spectrum of potential customers. Using a MVP version of OnePlan we have been working closely with the International Olympic Committee,FIFA,Glastonbury,INTERPOL,Great North Run,IRONMAN,Chicago Marathon and many less well known agencies,and events. We have in total engaged over 600 event professionals to understand their needs, wants and problems. They have made the demand for OnePlan clear. The Covid -19 pandemic has allowed us to create social distancing tools, enabling venues to control their audience flow alongside our standard security and safety tools. This has highlighted the appetite for a centralised planning platform like OnePlan where all stakeholders can see up to the moment planning for event safety. Key data * 87%of event planners are unhappy with current planning options. * 73%-No centralised system. * 87%-No dedicated tools or platform for event site planning. * 67%-No consistent style of planning * 82%-Site plan is static - Plan out of date on creation. * 91%-Sourcing up to date maps and satellite imagery is a major challenge. * 70%say they are not aware of a system designed for event site planning. * 48%say they will adopt OnePlan when the upgrades are completed. * 35%will strongly consider.

Results of Competition: UKRI Ideas to Address COVID-19: Innovate UK Article 25 Aug 2020

Competition Code: 2007_UKRI_IDEAS_COVID19_OPEN_ART25

Total available funding is £120m

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
KROMEK LIMITED	Automated detection of airborne SARS-CoV-2	£1,275,358	£765,215

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

Project description - provided by applicants
The World Health Organisation has identified testing for the virus and tracing the contacts of those positive cases as critical to the control of the COVID-19 pandemic. The NHS Test & Trace system is a key tool to minimise the transmission of COVID in the population, and is critical to re-opening the economy. The current system receives information on people who have tested positive, and attempts to trace other people they have come into contact with by determining the places they have visited whilst they are likely to have been contagious. This method relies on three key steps: 1.One person displaying symptoms of COVID, and returning a positive test 2.The positive test being reported to the Test & Trace system 3.Accurate and thorough determination of the places they have been This can lead to weaknesses in the system however, as it will not track asymptomatic carriers, relies on the individual to report, and also their recollection of their movements. We propose a detect and deter technology which will augment the Test & Trace system by, instead of solely testing individuals, additionally screening for airborne viruses at strategic locations. In addition to allowing tracking of individuals, it will allow added protection for premises. Kromek have developed a bacterial pathogen detector which automatically samples the air collected from a mobile unit as it travels across a city and uses next generation genetic sequencing to identify potential threats. We propose a project to add viral detection to the technology to create a proactive and automatic tool which can detect when an area has high airborne levels of the virus, to enable more effective Test & Trace. It will also massively reduce the time needed to alert Test & Trace to a potential spread as Test & Trace can be alerted within 2.5 hours of the virus being detected within the specified location, rather than following a positive test which can be up to a week after taking the test. We propose an 18 month project, which will see devices installed and trialled at key locations within 12 months.