11th April 2020

Dear Colleagues

Re: Novel solutions: an opportunity to contribute to the National Diagnostics Effort for COVID-19

We are writing to ask for your help with a very important aspect of the Government’s strategy to help deliver 100,000 coronavirus tests a day by the end of April.

In addition to efforts to scale up existing methods of testing, we are also seeking new and novel solutions and, in the first instance, asking if the university sector might be able to help with any of the four following specific challenges:

| 1. Dry swabs for use in virus detection | A key element of speeding up the end to end testing process is the availability of swabs that can be used easily and reliably to detect the virus in a range of different swabbing applications and age groups including for use in home testing and which can be used with multiple extraction platforms. |
| 2. Transport media that inactivates the virus | In order to increase laboratory throughput we are looking at ways to minimise processes including the need to handle test samples in Category 2+/3 facilities. We are looking for transport media solutions that inactivate the virus reliably or do not add significant steps to the laboratory process or impact on viral detection. |
| 3. Desktop PCR equipment for point of care testing | Taking samples and transporting them to testing labs takes time and may not always represent the best approach within clinical pathways. We are looking for the potential to add testing capacity through reliable and standards based testing at the point of care with desktop PCR machines that allow for fast, accurate and safe results for the operator. |
| 4. RNA extraction: new methods | RNA extraction capacities are currently challenged even with automated platforms. We seek new methods of extracting viral RNA or enabling viral detection without an extraction step would help remove this bottleneck, as long as they are “ready to go” and can be integrated into existing or optimised PCR testing chains. |

We would be very grateful if you would draw this to the attention of individuals in your university who might be able to help.

There is a live testing methods platform at https://testingmethods.crowdicity.com/ We hope that colleagues will be willing to add their solutions, offers, ideas, comments and any other responses to these challenges. They just need to go through a quick registration process to be able to add content. Every idea and comment will be considered.

This has been set up as an open platform so we can share and build on each other’s experiences and ideas. We hope that you will add to the content of this platform in that...
spirit. If you would prefer to put your idea forward confidentially to the closed part of this website, you can do this too.

We will pause the platform on the evening of Tuesday 14th April to have an initial review of the solutions and offers put forward.

This platform is a partnership between the Department of Health and Social Care, the UK Bioindustry Association, British In-vitro Diagnostics Association and the Royal College of Pathologists.

Please encourage people who might be able to contribute to these solutions about the platform. You could also tweet about it with the hashtag #TestingMethods2020. We hope you will be able to help us in this important work.

With best wishes

Professor Julia Buckingham CBE
President, Universities UK

Professor Dame Sue Hill DBE
Chief Scientific Officer and SRO for Genomics, NHS England and NHS Improvement