

Airborne SARS CoV-2 detection allows for adaptive mitigation of virus

The University of Maryland, Baltimore County uses Smiths Detection's BioFlash Biological Identifier to help confirm presence of virus in the air allowing for real time response to COVID-19.

STOP THE SPREAD OF COVID-19

At the start of the COVID-19 pandemic, Smiths Detection's team based at its Biotechnology Center of Excellence in Baltimore, MD, began developing a new capability to detect airborne SARS-CoV-2 with its BioFlash Biological identifier.

The instrument collects and analyses air samples using sensitive, selective and rapid detection technology to identify the presence of dangerous pathogens onsite without the need to involve a laboratory. The development team at Smiths Detection created a new consumable to be used in the BioFlash to target the SARS-CoV-2 virus from an aerosol sample. Following successful internal testing, Smiths Detection has been engaged in various external studies to further verify the COVID-19 detection capability, including working with the USAMRIID, who verified that the BioFlash could identify the aerosolized virus in a laboratory setting.



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KEEPING STUDENTS SAFE

More recently Smiths Detection began a collaborative pilot project with the University of Maryland Baltimore County, to offer the onsite testing capability for real-world use, aiming to help their Environmental Safety and Health (ESH) team with COVID-19 mitigation strategies on campus.

One early testing success came when a student working in a research facility tested positive for COVID on a diagnostic test. The ESH team used the BioFlash to test the facility's air in three locations and received no positive result. confirming the space was safe to re-enter for students and staff, who could be comfortable in the knowledge that the area was COVID-free.

Separately, in a collaborative effort with the Sports Medicine Department, an aerosol test conducted in a locker room following a team's practice resulted in a positive detection on the BioFlash. As the result of the positive environmental test, UMBC was immediately able to have the team and staff tested for COVID and found three individuals were positive for COVID.

DETECT SOONER

These two real-world applications of the BioFlash demonstrate how the system can be used to both confirm the safety of a site and to help mitigate the spread of the virus.

In this case, the COVID-positive individuals were able to be immediately identified and assisted, preventing further potential transmissions among the team and staff and at the team's future athletic competitions.

"We are delighted to see what we believe is a world-first for our technology. BioFlash, with its real-time results capability, has been used by UMBC in a real-world setting to successfully confirm the presence or absence of COVID-19 in the air and inform health and safety protocols"

Roland Carter - President, Smiths Detection

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REOPEN AND STAY OPEN

BioFlash works by collecting and analysing air samples using sensitive, selective and rapid detection technology to identify the presence of dangerous pathogens onsite without the need to involve a laboratory.

The <u>BioFlash</u>® Biological Identifier is a bioaerosol collection and identification system that provides rapid, sensitive and specific identification of various pathogens including viruses, toxins and bacteria. The BioFlash has been in use for over a decade by government agencies and commercial entities for detection of various biowarfare agents, including anthrax, ricin, and botulinum toxin.

This device can be used to protect against COVID in varying scenarios including locations such as doctor's offices, universities, conference rooms, hospitals and more. This is a step towards tackling this pandemic and keeping yourself and those around you safe.



The BioFlash Biological Identifier is available now. Learn more information at <u>www.smithsdetection.com</u>. Contact us today to see how the BioFlash can keep your space safe. "We were incredibly happy with the results of the BioFlash. COVID-19 has created a lot of concern for students, staff, faculty and parents, and emphasized the importance of robust strategies for protecting the health and safety of our community members. This system has demonstrated how it can be part of a larger COVID-19 mitigation and prevention strategy, alongside other important tools like sanitation, masks, regular testing, physical distancing, and symptom monitoring."

UMBC Vice President for Administration and Finance, Lynne Schaefer

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