

Claremont BioSolutions receives Phase I SBIR

Press Release No. 56

ClaremontBio is proud to announce that it has received a Phase I Small Business Innovative Research Grant from the National Institute of Health today in an effort to combat the problem of hospital acquired infections (HAI).

ClaremontBio proposes to develop a point-of-care (POC) device to rapidly extract DNA from clinical samples and/or swabs from medical devices, amplify DNA using an isothermal amplification reaction (developed by Ionian Technologies), and detect amplified nucleic acid using miniaturized real-time fluorimetry. The primary target pathogen that the ClaremontBio team will be focused upon for this project will be *Clostridium difficile* a common causative agent in enteric disease. Certain highly virulent strains are also associated with more severe morbidity and even mortality in some patients.

Pathogenic strains of *C. difficile* commonly produce two toxins, A and B, responsible for common symptoms associated with *C. difficile* infections (pseudomembranous colitis). ClaremontBio's team of researchers will focus on detecting targets within the two genes that encode for those toxins, *tcdA* and *tcdB*, in addition to targets within the *tcdC* gene to check for the presence of the highly virulent strain of *C. diff*.

There is a clear clinical need for a rapid but sensitive test for *C. difficile* infection. The current and widely used EIA tests are rapid but lack sensitivity whereas the more sensitive tests (cytotoxicity assay or *C. difficile* culture) require one or more days to complete. There is also a need for a reliable, sensitive, and expeditious method for testing for environmental contamination within clinical settings. A sensitive assay that is capable of processing and detecting *C.diff* spores would substantially protect the health of patients and reduce the cost of healthcare in hospitals, nursing homes and rehabilitation facilities.

If you would like to learn more about ClaremontBio, please contact us here.

For Information:



MAKING THE EXTRACTION OF DNA EASY™

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