Opportunity

Lawrence Livermore National Laboratory (LLNL), operated by the Lawrence Livermore National Security (LLNS), LLC under contract no. DE-AC52-07NA27344 (Contract 44) with the U.S. Department of Energy (DOE), is offering the opportunity to secure a license to exercise patent rights for commercializing its automated diagnostic kiosk for diagnosing diseases technology.

Background

Often, sick individuals may not know what is afflicting them until they see a health care provider, have diagnostic tests done, and are counseled on the results. Not only does this process involve the time taken to make an appointment and travel to see a doctor, but also the time needed to have the appropriate tests performed and the wait for the results to be returned. The time passed from initially scheduling a doctor’s appointment to receiving final test results delays potential treatment. Thus, a publicly accessible and affordable method for rapid one-stop diagnostics to reduce time to treatment would have many benefits.

Description

LLNL scientists have created a standalone pathogen identifier that can be placed in public settings, such as in stores or on street corners. Not unlike an ATM in physical size, this kiosk will accept biological samples from an individual for multiplexed analysis. The sample collection process will be sufficiently simple such that anyone could begin the diagnostic process after making the appropriate payment via cash, credit, or debit cards. After the customer signs the appropriate disclaimers concerning diagnosis and liability, a sterile swab or collection tool or vial, viral transport media, instructions on collecting a sample, gloves, and antiseptic wipes would be dispensed to them. The customer then would select what pathogens they want to be screened for before the assay begins. The multiplexed assay itself is comprised of multiple prior IP developed at LLNL and can detect the presence of bacterial or viral pathogens including, but not limited to, influenza, streptococcus, and salmonella.

The instrument will have the capability to run multiple samples simultaneously. Once the assays are complete, the customer will be emailed or contacted via phone within three hours to be given their results as well as a notice that all results are not official until confirmed by a medical diagnostic laboratory. The results will include a description of the identified pathogen, the typical symptoms associated with it, and the expected course of the disease. Finally, epidemiological data collected over the previous several months by regional machines regarding the percentage of other individuals infected by the same pathogen will be provided to the customer.
Advantages

- Rapid, inexpensive, and easily accessible pathogen identification for the public
- Multiplexed assays provide opportunity for an array of potential samples to be tested for multiple diagnoses simultaneously
- Pathogen identifier results may prompt the infected individual to seek proper medical attention they otherwise may not have received

Potential Applications

- Placement in a public setting to allow infected individuals to correctly identify what pathogen is afflicting them
- Tracking and reporting anonymous epidemiological data and trends to the government (NIH, CDC, FDA, etc.) for action and/or research

Development Status

LLNL holds a patent 8,647,573 “Automated diagnostic kiosk for diagnosing diseases” for this technology (LLNL internal case # IL-11738).

Please visit the IPO website at https://ipo.llnl.gov/resources for more information on working with LLNL and the industrial partnering and technology transfer process.

Note: **THIS IS NOT A PROCUREMENT.** Companies interested in commercializing LLNL’s automated diagnostic kiosk for diagnosing diseases technology should provide a written statement of interest, which includes the following:

1. Company Name and address.
2. The name, address, and telephone number of a point of contact.
3. A description of corporate expertise and facilities relevant to commercializing this technology.
Written responses should be directed to:
Lawrence Livermore National Laboratory
Innovation and Partnerships Office
P.O. Box 808, L-795
Livermore, CA 94551-0808
Attention: FBO 440-19

Please provide your written statement within thirty (30) days from the date this announcement is published to ensure consideration of your interest in commercializing LLNL’s automated diagnostic kiosk for diagnosing diseases technology.