

Hemex Health and Partners Win Vodafone Foundation 2018 Wireless Innovation Contest

Hemex Health, Inc., developers of a novel sickle cell and malaria point-of-care diagnostic, announced that their group project had won first prize in the yearly Vodafone Wireless Innovation contest. The project, which is code-named “SMART” for “Sickle cell and Malaria Accurate Remote Testing”, is led by Case Western Reserve University (CWRU) and will be carried out in collaboration with the University of Nebraska Medical Center, International Foundation against Infectious Disease in Nigeria (IFAIN), eHealth Africa, and Hemex Health. SMART integrates the Hemex point-of-care device with a mobile app running on smart phones and tablets that link patient data with an electronic medical record system. The result is a connected point-of-care platform for diagnosing, treating, and following up with sickle cell and malaria patients in low resource communities.

SMART will be piloted in Kano, Nigeria, an area that carries a high burden of sickle cell disease and malaria, with the vision of creating an approach that could be leveraged in other regions and countries. It is estimated that SCD affects nearly 25 million people globally and that 50 to 80 percent of infants born with SCD in Africa die before age 5 [1]. WHO estimates that 3.4 billion people are at risk of malaria, with 216 million cases and 445,000 deaths occurring annually.

“The Hemex device was chosen for this project because it brings the ability to affordably and quickly diagnose malaria and sickle cell disease. And since it will store and wirelessly transmit data to a patient record, it fits these challenging environments where paper records and manual data collection are inadequate,” explained [Patti White](#), Hemex Health CEO. [Dr. Umut Gurkan](#), an assistant professor in Mechanical & Aerospace Engineering at CWRU, who led the team added, “The current methods used to diagnose sickle cell are cumbersome and inaccurate, and paper system for tracking patients can result in mix-ups. In order for this painful and life-threatening disease to be successfully managed, early, accurate testing and consistent follow-up are required.”

The mobile health application and electronic medical record system that will capture Hemex malaria and sickle cell test results are being developed by eHealth Africa in coordination with IFAIN. [Dr. Stephen Obaro](#), Professor of Pediatrics and Infectious Diseases at University of Nebraska Medical Center in Omaha and Director of IFAIN, said, “The Hemex device will improve the quality of diagnostics and shorten the turnaround time for results, which is going to be a huge benefit in improving the quality of care for people the people in Kano who have such a very high burden of disease.” The system will also provide a dashboard for public health administrators who can use it to coordinate responses to malaria outbreaks.

The Vodafone Americas Foundation [unveiled the winners](#) and awarded \$600,000 in grants at the Social Innovation Summit in San Francisco. As the first prize winner, SMART received a \$300,000 award. Now in its 10th year, the contest features the latest connected innovations designed to address critical issues facing the global community.

[View the finalists video](#) and learn more about the [SMART project](#).

^[1] [Aygun & Odame, International Journal of Africa Nursing Sciences, 2015](#)

ABOUT HEMEX HEALTH: Hemex Health develops and commercializes technologies that help make affordable life-sustaining medical care possible for people everywhere. Hemex products are designed to

be easy to use and to provide benefit quickly and effectively for the healthcare worker and patient at the point-of-need. The company targets global locations with elimination goals for malaria and with large populations at risk for sickle cell disease. Hemex Health is headquartered at the OTRADI Bioscience Incubator located in Portland, Oregon. More information can be found by going to www.hemexhealth.com.

ABOUT CASE WESTERN RESERVE UNIVERSITY: Case Western Reserve University is one of the country's leading private research institutions. Located in Cleveland, we offer a unique combination of forward-thinking educational opportunities in an inspiring cultural setting. Our leading-edge faculty engage in teaching and research in a collaborative, hands-on environment. Our nationally recognized programs include arts and sciences, dental medicine, engineering, law, management, medicine, nursing and social work. About 5,100 undergraduate and 6,200 graduate students comprise our student body. Visit case.edu to see how Case Western Reserve thinks beyond the possible.

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