

Hemex Health

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FOR IMMEDIATE RELEASE

Hemex Health and Case Western Reserve University Receive NIH Fast-Track SBIR Grant for Sickle Cell Disease Diagnostic

Technology is Also Recognized by 2018 USPTO Patents for Humanity

PORTLAND, OREGON – September 15, 2018 – Hemex Health, an early stage diagnostics company located in Portland, Oregon, has been awarded a \$1.725M Small Business Innovation Research (SBIR) [Fast-Track grant](#) by the National Heart, Blood, and Lung Institute (NHLBI) of the National Institutes of Health (NIH). The grant was awarded to help Hemex Health in conjunction with Case Western Reserve University (CWRU) commercialize technology for a fast, accurate, quantitative sickle cell disease diagnostic for the point-of-care. The inventors of the technology from CWRU were also awarded an Honorable Mention by the USPTO Patents for Humanity.

Hemex Health specializes in developing lab-quality, point-of-care diagnostics for the developing world. Its initial releases will be diagnostics for malaria and sickle cell, two diseases that disproportionately affect the developing world. The SBIR Program is a congressionally-authorized program for domestic small businesses with the objective of encouraging technological innovation. Started as a one-year pilot in 2012, the USPTO Patents for Humanity recognizes businesses, inventors, non-profits, and universities who leverage their intellectual property portfolio to tackle global humanitarian challenges.

“The technology that drives the sickle cell disease diagnostic, which we call “microchip electrophoresis”, is a small, inexpensive chip that can be used to identify sickle cell disease (SCD) and inherited hemoglobin diseases, differentiate between trait and disease, and quantify the percentages of different types of hemoglobin in a patient much faster and more affordably than a large, complex laboratory test can,” said Patti White, Hemex Health CEO. She explained that the need for this test is critical in developing countries where lack of an affordable viable test results in significant childhood mortality. “WHO estimates that 50% to 90% of children in Sub Sahara Africa under 5 die from SCD, but that 70% could be saved with early diagnosis and cost- effective treatment,” added Ms. White.

Peter Galen, Hemex’s Chief Innovation Officer and Principal Investigator for the grant, said the SBIR funds would be used for design validation and clinical testing, as well as further simplifying the blood collection process. “Our goal is to enable an entry-level healthcare worker to administer the test in under 10 minutes, start to finish,” he said. “That’s about the length of time of an infant’s first vaccination appointment.”

Hemex licensed the microchip electrophoresis technology from CWRU, a leading global health university. The inventor, Dr. Umut Gurkan, co-investigator for the grant, and Director of the Micro-Fabrication Lab at CWRU (and a Hemex employee) was inspired to invent microchip electrophoresis to make life-saving blood screenings universal. “Even though the gold standard test for SCD screening, electrophoresis, is a routine test for researchers, it is not available to those who are in need at the point of care,” said Dr. Gurkan. “Our team decided to re-engineer the gold standard hemoglobin

electrophoresis to make it accessible to a broader population.”

Introduction of the platform supporting the malaria and SCD diagnostic is expected to be introduced initially in India next year.

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, CWRU offers 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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