

# MEDCITY News

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## GE, NFL Fund 5 Emerging Companies Attempting a Better Test for Concussion

By: Deanna Pogorelc

The device that [Cortical Metrics](#) is developing looks like a computer mouse but is designed to some day change the way doctors detect and diagnose concussion.

The University of North Carolina spinoff is one of five companies (plus 11 university and medical school-based research groups) just awarded \$300,000 in funding from GE and the National Football League. A [panel of judges](#) chose the 16 projects as finalists for phase one of GE and the NFL's \$20 million [Head Health Challenge](#), an initiative the duo hopes will speed diagnosis and improve treatment for traumatic brain injury.

Cortical Metrics says its device vibrates a person's fingertips, activating adjacent places in the brain that typically communicate with each other. When plugged into a computer, the device works with a web-based program to determine how well those places in the brain are communicating, as a way to measure the severity of a brain injury.

[Banyan Biomarkers](#) and [BrainScope Company](#) are also focusing on point-of-care diagnostic devices. Banyan is [working with a University of Florida football team physician](#) on a biomarker blood test that would identify traumatic brain injury within 30 minutes. It [secured \\$6 million](#) from private investors this summer.

Meanwhile, BrainScope is first targeting the military market with a mobile device its developing that would use EEG technology to help medics identify and stage traumatic brain injury. The company [will work with Purdue Neurotrauma Group](#) to conduct a study in college athletes.

Another company called [Quanterix](#) is exploring the use of its singular molecule array technology to develop and validate blood biomarkers that would help physicians make more accurate TBI diagnoses and better predict long-term prognosis. It's worked with the Swedish Hockey League on a pilot study. The last company, [ImmunArray Inc.](#)'s research is exploring how the body's immune response is connected to the progression of brain injury, with the ultimate goal of developing a simple blood test to diagnose TBI quickly and with certainty.

A complete list of finalists is [here](#). As many as five projects could win an additional \$500,000 next year. The [second phase of the Head Health Challenge](#), now under way, also includes Under Armour as a partner and is looking for innovative materials that could protect the brain from injury, as well as new tools for tracking head impacts.