

## **Press Release**

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### **QUASAR's Dry Sensor Technology is a Finalist in Nokia Sensing XCHALLENGE**

On October 2<sup>nd</sup>, at the Health 2.0 conference in Santa Clara, Calif., the winner of the \$2.25 million Nokia Sensing XCHALLENGE will be revealed. Quantum Applied Science and Research's (QUASAR) ECG PAD concept of a completely unobtrusive cardiac health monitor is one of 12 finalist teams in the competition.

Long-term monitoring of the heart's activity is critical for detecting early warning events, such as atrial fibrillations (AFibs), which can significantly increase the risk of stroke. Current technology uses wearable cardiac monitoring belts or stick-on patches, which can be difficult to use on daily basis for extended periods, and are typically only prescribed after a major cardiac event.

QUASAR is a San Diego-based company that has developed an innovative solution to unobtrusive life-long cardiac health monitoring. QUASAR's ECG PAD consists of a chair pad with embedded sensors that work through clothes to monitor the heart's activity, known as an electrocardiogram (ECG). QUASAR's patented sensors record a high fidelity ECG signal that is of sufficient quality to enable medical diagnosis of AFibs and other cardiac events. These through-clothes sensors record ECG whenever a user sits on the pad. This radically different approach to cardiac monitoring is less intrusive on at-risk patients and over time, records even more data than continuous monitoring over a period of weeks.

To bring the data to physicians, QUASAR has partnered with Vivid Spectrum Technologies to wirelessly stream the ECG PAD's data to the cloud, where advanced algorithms can flag events for a network of cardiologists to review.

This ECG PAD will enable completely unobtrusive at-home monitoring of high risk patients' cardiac health. This type of life-long cardiac monitoring will revolutionize the world of health care by providing physicians with warnings as soon as relevant cardiac events are detected. This will enable preemptive management of cardiac health, which will hopefully reduce the incidence of stroke, and consequently the social and economical costs associated with it.

## **ABOUT QUASAR**

Quantum Applied Science and Research (QUASAR) was founded in 1998 to develop, produce, and market state-of-the-art, low-noise electromagnetic sensing technology, and has become a world leader in noninvasive physiological monitoring. QUASAR's work builds on revolutionary noninvasive sensors integrated with robust hardware and precision algorithms to produce systems that monitor cognitive and physiological states. A multi-million dollar annual R&D program ensures rapid translation of our newest discoveries into innovative commercial products. QUASAR's products include dry-sensor EEG

headsets and ECG chestbelts that can be put on rapidly by minimally trained users and record high fidelity signals. For more information, visit [www.quasarusa.com](http://www.quasarusa.com).

#### ABOUT VIVID SPECTRUM TECHNOLOGIES

Vivid Spectrum Technologies provides web engineering services and develop rich cloud-based applications for streaming, processing, management and presentation of highly dynamic sensor data over the Internet. Vivid Spectrum Technologies' products include turn-key web-based data logging solutions for applications where long-term monitoring at high sampling rates is required. For more information, visit <http://www.vivid-spectrum.com>.

#### ABOUT XPRIZE

Founded in 1995, XPRIZE, a 501(c)(3) nonprofit, is the leading organization solving the world's Grand Challenges by creating and managing large-scale, high-profile, incentivized prize competitions that stimulate investment in research and development worth far more than the prize itself. The organization motivates and inspires brilliant innovators from all disciplines to leverage their intellectual and financial capital for the benefit of humanity. XPRIZE conducts competitions in five Prize Groups: Education; Exploration; Energy & Environment; Global Development; and Life Sciences. Active prizes include the \$30 million Google Lunar XPRIZE, the \$10 million Qualcomm Tricorder XPRIZE, the \$2.25 million Nokia Sensing XCHALLENGE and the \$2 million Wendy Schmidt Ocean Health XPRIZE. For more information, go to [www.xprize.org](http://www.xprize.org).

#### ABOUT THE NOKIA SENSING XCHALLENGE

The Nokia Sensing XCHALLENGE is a \$2.25 million global competition to develop sensing technologies that capture meaningful data about a consumer's health status, surrounding environment and risk of developing a health condition. The advancements in sensing technology resulting from this competition will help lay the foundation for a mobile health revolution that transforms healthcare into a system that is highly personalized, instantly accessible and relevant to the medical needs of each individual. For more information, visit <http://www.nokiasensingxchallenge.org>.