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AEGIS is Partnering with University Team to Develop a Sensor for Early Warning of Heart Attacks

Huntsville, Alabama, October 20, 2008 — The AEGIS Technologies Group is using nanotechnology to develop a sensor that measures certain cardio protein levels that indicate the potential for a heart attack. The sensors measure electrochemical interactions at the molecular level and offer very good sensitivity and selectivity for the detection of proteins, enzymes and even select DNA sequences in very small solution volumes. This technology offers unprecedented opportunities for clinical detection of numerous medical conditions and screening tools for the general public, including short turnaround time (STAT), single use, and point of care testing devices (POCT) for bed side analysis.

The nano sensors are being fabricated by AEGIS at Oak Ridge National Laboratory's Center for Nanophase Materials Science (CNMS). This facility provides the capability to fabricate sensors with nanoscale precision. The sensor designs are being aided by digital simulation in progress in laboratories at the Joint Program in Biomedical Engineering at The University of Memphis and University of Tennessee Health Science Center. The University team, led by Dr. Erno Lindner, is providing test, evaluation and characterization of electrochemical sensor performance.

AEGIS is committed to developing diagnostic tools using micro and nanotechnology. "We believe that we will one day be able to use this technology to quantify protein levels using a device that is both affordable and very small", says Mr. David Thomas, Vice President, Microsystems.

AEGIS' multidisciplinary team has expertise in critical areas of nanoscale device fabrication and biochemistry. Since detector sensitivity increases with smaller dimensions, one of the goals of the project is to determine the limit of feature size that can be fabricated using e-beam and focused ion beam techniques at Oak Ridge. The AEGIS team is also working to understand the effect of different detector materials and ultimately the detection limit of nanofabricated sensors.

For more information about the technology used in this project please visit the [AEGIS Technologies Group](#).

About AEGIS Technologies Group

AEGIS has 20 years experience in providing advanced technology and expert consulting services to industries throughout the world. We create innovative solutions to challenges requiring specialized knowledge including expertise in micro and nano technologies, sensors for diagnostics, simulation and software development, integration and analysis, training simulator development, HLA/DIS technologies, C4I-to-Simulation interoperability, and Modeling and Simulation VV&A programs for software/simulations. To learn more about AEGIS, please visit the company's website at www.AEGISTG.com.