

Biosign and McMaster Collaborate on Health Information Assurance

TORONTO, ONTARIO, Tuesday, July 13, 2010 – A technical collaboration announced today between Biosign Technologies Inc. (**CNSX: BIO**) and McMaster University will use Biosign technology to benchmark a framework for providing trusted health information services – a linchpin requirement for a meaningful use of information technology in health care.

“This collaboration seeks to develop a standard certification program for devices generating digital health data,” said Tom Maibaum, Canada Research Chair in the Foundations of Software Engineering at McMaster and principal investigator for a major project funded by the Ontario Ministry of Research and Innovation. “Biosign had the foresight to add intelligence to its UFIT[®] system, making it most suitable for inspiring and testing advanced methods for certifying software-intensive, automated health monitors.”

Biosign will provide one million dollars in funds and in-kind contributions over five years. Biosign technology, products, and expertise will be used in several projects, involving teams from McMaster’s Departments of Computing & Software, and Psychology, Neuroscience & Behaviour. Work items include technical analysis of regulatory requirements, software specifications, design of fault tolerance mechanisms, design of correct scientific analysis software, and assessments of product usability, safety, and effectiveness. Tools and methods developed under this collaboration will be used by Biosign to satisfy regulatory and market expectations while improving key business performance metrics, such as time-to-market and break-even point.

“Currently, the certification of software-intensive systems relies on assessing the development process rather than the product”, said Alan Wassyn, acting director of McMaster’s Centre for Software Certification (McSCert) and McMaster's Software Quality Research Lab. “The direct observation of a product, however, provides stronger assurance than the credentials of its production method. Our goal is to develop methods for direct product verification that will simplify the relation between vendors, regulators, and consumers. Biosign UFIT[®] products are verifiable in the field, making them ideal for this purpose.”

Biosign has developed a unique quality assurance framework for the UFIT[®] system. It includes solutions for common monitoring problems, such as rapid evaluation of automated device and result auto-verification, and a virtual instrumentation manager that controls the execution of measurement applications and utilities for scheduling tests and communicating results. The software framework will be a Biosign offering, open for new products created for the UFIT[®] platform. Engineers at McMaster will standardize this framework to enable the online provision of trusted health information services by medical devices, such as UFIT[®] TEN-20 [1].

McSCert will assist Biosign in conducting and monitoring clinical studies and market pilots. Starting with the launch of UFIT[®] TEN-20 [2], McMaster experts will investigate how using a single Biosign multi-core signal processor could improve the marketability of information in health care.

Radu Leca, president of Biosign, said: “McSCert has taken a unique approach to quality assurance, based on their experience with safety-critical products, ranging from nuclear reactors and motor vehicles to heart pacemakers. We welcome their engineering expertise as we work on making health monitoring engaging and assuring.”

References

1. Biosign Certified for Noninvasive Glucometry ([Biosign Press Release, February 11, 2010](#))
2. Biosign Signs European Distribution Agreement ([Biosign Press Release, July 2, 2010](#))

Contact

Radu Leca
Biosign Technologies Inc.
Phone: (416) 218-9800 ext. 234
Email: ceo@biosign.com

Gene Nakonechny
McMaster University
905-525-9140 ext. 26781
genen@mcmaster.ca

About Biosign Technologies Inc.

Biosign Technologies Inc. (CNSX: BIO) provides biomedical systems. Key applications include intelligent systems for noninvasive monitoring of common health risks associated with blood pressure, glucose, and medication. The core technology combines measurement, analysis, and rapid knowledge formation to support health monitoring across global markets. The UFIT[®] medical device technology powers quality data collection and analytics for clinical diagnostics, self-care, wellness, disease state evaluation & management, and remote patient monitoring. For more information on Biosign, please visit www.biosign.com.

About McMaster University

McMaster is one of four Canadian universities listed in the Top 100 worldwide, and is renowned for its innovation in both learning and discovery. It has a student population of 23,000 and more than 140,000 alumni in 128 countries. For more information about McMaster University and the Faculty of Engineering, visit www.eng.mcmaster.ca

About McMaster Centre for Software Certification

The McMaster Centre for Software Certification is a research centre within the Faculty of Engineering. Its aims include research, education and outreach related to software quality and regulation. It hosts a \$21 million research collaboration funded by the Ontario Research Fund. Nineteen researchers from three universities and eight industry partners are involved with the Centre. The university partners are: McMaster University, University of Waterloo and York University. The industry partners are: AMD, Atomic Energy Canada, Biosign Technologies, Center for Integration of Medicine and Innovative Technology, Legacy Systems International, Ontario Power Generation, QNX Software Systems International, and Systemware Innovation. McSCert also hosts a \$14 million Automotive Partnership Canada project involving academic and industrial partners across Canada, focusing on software development techniques for automotive software. That project also has safety at its core.

The CNSX has neither approved nor disapproved the contents of this press release.