

## FOR IMMEDIATE RELEASE

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### The National University of Singapore Hosts Plexon Inc's President Harvey W. Wiggins

DALLAS, TX -- (January 21, 2013) - Plexon Inc, the leader in advanced hardware and software solutions for neuroscience and behavioral research, announces that its President, Harvey W. Wiggins, was honored to kick off the company's 30<sup>th</sup> anniversary year by presenting to a crowd of young engineers studying integrated circuits & embedded systems at the National University of Singapore (NUS). He was hosted by the Department of Electrical and Computer Engineering.

Harvey immensely enjoys interacting with and mentoring engineering students. His commitment is evident through his avid participation on the Industry Advisory Boards for both the Southern Methodist University (SMU) Department of Electrical Engineering and the University of Texas at Dallas (UTD) School of Engineering, as well as his Adjunct Professorship in the Erik Jonsson School of Engineering and Computer Science at UTD. As part of the NUS program on neural recording system and neural signal processing, Harvey shared his knowledge in a presentation titled "Architecture and Design of High Channel Count Neural Data Acquisition Systems."

As an introduction to his talk, the department set the stage by stating "For invasive neural recording and brain-machine interface, the idea of neural assemblies has been closely associated with the occurrence of spike patterns in convergently/divergently connected networks, where recording a sufficient number of neurons is a prerequisite to establish casual connectivity. Over the past 50 years, progresses in neural recording instrument have allowed the number of recorded neurons to double every 7.4 years, a mimicked "Moore's Law". Previous BCI recording systems allow simultaneous data acquisition from about 100 channels, equivalently up to 200 neurons in total, which is small in number compared with a natural system. To continue with the exponential increase in recording density, this talk will present faced challenges, followed by solutions from circuits, electrode interface, system, and algorithms. We believe the presented technology will support the mimicked "Moore's Law" on recording density in the next decades."

The program took place at 10:00 a.m. on the NUS campus. Harvey enjoyed his visit to the campus and entertaining inspiring questions from the students.

#### About Harvey W. Wiggins

Harvey W. Wiggins is well-known worldwide as an early pioneer of establishing the neural data acquisition equipment market as a commercial industry. Almost 45 years ago, Harvey wrote his first neural spike acquisition program on a little minicomputer using paper tape and a Teletype for development I/O. Fifteen years following that pivotal start, Harvey founded Spectrum Scientific in 1983 in an effort to pass on his experience and provide powerful signal capture, processing, and analysis to the broad field of neuroscience researchers. Spectrum Scientific became known as Plexon in 1996.

Backed by Professor Don Woodward of the University of Texas Southwestern Medical School, Harvey designed the Multichannel Acquisition Processor (MAP) Data Acquisition System – affectionately called the "Harvey Box" even to this day. The MAP System was the first design to provide real-time processing using parallel DSP chips of up to 128 channels of spike signals. Back then, it was controlled by a 486-class PC. Harvey personally designed all of the hardware and performed the DSP and microcontroller

programming. At that time, no other company was addressing the need for large scale, real-time neural spike acquisition systems.

Harvey began his journey at the University of North Texas (UNT) where he majored in math and physics. Following graduation, he advanced his educational foundation at Southern Methodist University (SMU) where he earned his Masters of Science degree in Electrical Engineering, carrying double majors in Computer Science and Biomedical Engineering. Harvey's early career included computer engineering for Nuclear Chicago Corporation and leading a research computer facility at the Callier Center for Communication Disorders where he first became enamored with neurophysiology.

After 30 years of service to researchers and numerous corporate awards, Harvey continues to lead Plexon with the same energy and vision that fueled his entrepreneurial spirit decades ago. He maintains an active lifestyle and memberships in such organizations as Society for Neuroscience, the Institute of Electrical and Electronic Engineers (IEEE), and the Association for Computing Machinery. He has been recognized repeatedly for his vision and leadership – including having been featured and described in the magazine *D CEO* as, "Certain people just don't need last names."

Harvey returns to the academic environment whenever he can, and fortunately his position as Adjunct Professor in the Erik Jonsson School of Engineering and Computer Science at the University of Texas at Dallas (UTD) allows him to do just that. He most enjoys mentoring and influencing the education of bright young engineers through his participation on Industry Advisory Boards for the SMU Department of Electrical Engineering and the UTD School of Engineering as he has done for years, and for the foreseeable future.

#### **About Plexon Inc**

Plexon is a pioneer and leading innovator of custom, high performance data acquisition, behavior and analysis solutions specifically designed for scientific research. We collaborate with and supply thousands of customers including the most prestigious neuroscience laboratories around the globe driving new frontiers in areas including basic science, brain-machine interfaces (BMI), neurodegenerative diseases, addictive behaviors and neuroprosthetics. Plexon offers integrated solutions for *in vivo* neurophysiology, optogenetics, and behavioral research -- backed by its industry-leading commitment to quality and customer support. [www.plexon.com](http://www.plexon.com).