



# GWT/IEEE Joint Seminar on Bluetooth Low Energy (BLE) Communication System for Medical Applications and Medical Body Area Network (MBAN) System

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**President & CEO**

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**Abstract:** Bluetooth® Low Energy (BLE) and Medical Body Area Network (MBAN) technologies have become promising options for wireless medical applications. However, increased body loss at the ISM frequencies utilized in a BLE communication system and common interference sources, including Wi-Fi, IoT, wireless power charging, microwave-ovens, etc. present challenges for medical applications. MBAN frequencies are also quite close to the ISM frequency band. In this seminar, both BLE medical system & MBAN system analysis will be presented. System and interference testing will be discussed. User-hand effects on the system performance and Specific Absorption Rate (SAR) will also be examined. The seminar will include material presented on BLE & MBAN Communication Systems for Implants and Body-worn Devices at the FDA.

**Biography:** Dr. David Nghiem is the Founder, President and CEO of Global Wireless Technology (GWT), Inc. Dr. Nghiem has spent many years in the telecommunication and medical industries, including Harris Corporation, Qualcomm, USA Wireless and Medtronic, and has become an industry leader in medical wireless telemetry systems. He was an Assistant Dean of the Cullen College of Engineering, and a Director of the Telecommunication Center at the University of Houston. Dr. Nghiem is also a senior IEEE member. He was the Chairman of the IEEE-MTT-S Twin Cities chapter. In 2016, Twin Cities IEEE Section has honored Dr. Nghiem's outstanding engineering career with the IEEE Outstanding Engineer Award. On February 10<sup>th</sup>, 2017 Dr. David Nghiem also gave a seminar on BLE & MBAN Communication Systems for Implants and Body-worn Devices: Issues & Solutions at the Center for Devices and Radiological Health Office of Science and Engineering Laboratories - U.S. Food and Drug Administration.

**Time:** 11:30 AM – 12:00 PM Social/Lunch  
12:00 PM – 1:00 PM Presentation

**Day:** Wednesday

**Date:** May 24<sup>th</sup>, 2017

**Place:** Best Western Plus  
1000 Gramsie Rd.  
Shoreview, MN 55126

**Free Registration:** Please send a request to [Seminar@GlobalWirelessTechnology.com](mailto:Seminar@GlobalWirelessTechnology.com) before May 1<sup>st</sup>, 2017. Seats are limited.