



Dr. Bruce H. KenKnight received his PhD in Biomedical Engineering from the University of Minnesota in 1997. He earned his PhD while working full time, which is almost impossible, but it frames his exceptional career, one that merits his recognition with this award. Bruce has accumulated nearly 150 patents and 50 peer-reviewed publications related to innovative devices and therapies for cardiac rhythm management (CRM) and heart failure mitigation since his first industrial position starting in 1985 with GE Medical. Many of these innovations relate to novel pacing therapies for augmentation of cardiac output and reverse remodeling leading to improved clinical outcomes in patients with heart failure.

The majority of his career, thus far, was 19 years with Guidant (acquired by Boston Scientific Corp. during his 1990-2009 tenure). Examples of research programs he directed that led to commercial products include the RENEWAL CRT-D systems and EASYTRAK leads, as well as the RAPIDO family of LV lead delivery systems. At Guidant/BSC-CRM, he rose to Vice President, Department of Research and New Business Development, CRM Division. In that capacity, Bruce was responsible for development and commercial introduction of novel technologies for treating patients with bradycardia, tachycardia and heart failure, leading global research and business development functions for the CRM division within a multi-million dollar annual budget. In 2009, Bruce elected to pursue a new career opportunity, becoming President & CEO, Valtech Cardio Ltd in Tel Aviv, where he developed and implemented strategic objectives and tactical plans for efficient development and commercial introduction of novel technologies for treating the diseased mitral valve. This led to First-in-Man trials for two products and “Best Technology Award” at the 2010 Innovations in Cardiovascular Interventions Meeting. Bruce’s quest for innovation returned to his longstanding interest in heart failure mitigation, joining Cyberonics in 2011 to spearhead the development and commercialization of vagal nerve stimulation for treatment of chronic, symptomatic heart failure. His accomplishments at Cyberonics thus far include completion of the first clinical evaluation of Autonomic Regulation Therapy using implantable VNS Therapy, where he sponsored product development of the VITARIA System (pulse generator, lead, programmer software). Currently as Vice President, Emerging Therapies, at Cyberonics, Bruce has also obtained CE Mark for product launch in Europe. Bruce has co-authored 7 peer-reviewed research publications since 2013 on this potentially paradigm-shifting approach to heart failure management. These publications reinforce his continuous, essential contributions to the science and technology underlying the products that he navigates to commercial launches.

Beyond these outstanding professional achievements, Bruce has provided extensive professional service, including adjunct professor roles at 3 universities (including UMN for 15 years, where he developed two courses and regularly offers one) and external advisory boards for leading BME departments at 6 universities (including John Hopkins, Northwestern, and BU as well as UMN; he sits on 5 separate boards at UMN alone), and regular manuscript reviewing for 4 journals, among a long list of examples. He has also been continuously involved with FIRST Robotics for almost 10 years as judge, advisor, and coordinator.