Abstract

Developing medical devices certainly involves a solid background in Mechanical, Chemical and if needed, Electrical Engineering. But the road to an approved device involves a deep understanding on the devices interaction with the body, the baseline progression of disease and the capabilities of clinical trials to detect any improvements in health attributable to the device. This presents a great opportunity to continue our learning and attain a more holistic perspective on the contribution an engineer can make to healthcare. Complex issues that are well beyond my core education on Chemical Engineering and biomaterials, like healthcare economics, ethical quality control and meaningful clinical trial results will be explored.

Speaker Biography

Richard Rapoza is divisional vice president of R&D, New Technologies and Therapy Innovation at Abbott Vascular in Santa Clara, CA. He has more than 25 years of experience in the cardiovascular field, with expertise in biomaterials research engineering, development engineering, marketing, quality, manufacturing, and innovative produce development. Abbott ranked No. 1 in the medical products and equipment category of Fortune’s 2014 World’s Most Admired Companies list.

Richard has led the development scale-up, and applicability of game-changing medical technologies, including the world’s first commercially available drug-eluding bioresorbable vascular scaffold (BVS), a temporary stent that dissolves over time after opening up blocked coronary arteries. Abbott’s BVS technology received top honors in The Wall Street Journal’s 2011 Technology Innovation Awards, in the medical devices category, and a 2012 Edison Award, with gold honors, in the science and medical/surgical aids category. In 2013, the technology was honored with an R&D 100 Editor’s Choice Award.

Richard earned a bachelor’s degree in chemical engineering from UC Berkeley, and MBA from Haas School of Business, also at UC Berkeley, and a PhD in chemical engineering from the UW.