Mr. Kiani is the founder, Chief Executive Officer and Chairman of the Board for Masimo Corporation, a publicly held (since 2007) global medical technology company. Mr. Kiani has held these positions since Masimo’s inception in 1989. Joe Kiani founded Masimo to improve the accuracy of noninvasive patient monitoring. He was convinced that the use of adaptive signal processing in the measurement of physiological parameters could solve the problems of motion artifact and low signal to noise problems, which had plagued invivo monitoring and especially pulse oximetry. Pulse oximetry is the noninvasive measurement of the oxygen saturation of arterial blood and is widely recognized as the 5th vital sign.

Under Mr. Kiani’s leadership, Masimo has grown from a “garage start up” to an international medical technology innovator and device manufacturer, employing over 2,500 people worldwide. Masimo has technology license and product distribution agreements spanning the globe with leading patient monitoring manufacturers such as Atom, Datascope, GE Medical, Medtronic, Philips, Spacelabs and Zoll. In the meantime, product revenues have increased 4-fold in the last five years. This phenomenal growth can be attributed to the urgent need and clinical preference for accurate, reliable and advanced patient monitoring technologies innovated by Masimo.

Today, Masimo is responsible for the development of innovative, award-winning noninvasive patient monitoring technologies that have revolutionized pulse oximetry:

- In 1995, Masimo debuted Masimo SET® Measure-Through Motion and Low Perfusion pulse oximetry, which virtually eliminated false alarms while increasing pulse oximetry's ability to detect life-threatening events.
- In 2005, Masimo introduced Masimo Rainbow SET® Pulse CO-Oximetry™, a breakthrough noninvasive blood constituent monitoring platform that measures many blood constituents previously requiring invasive procedures—including total hemoglobin (SpHb®), oxygen content (SpOC™), carboxyhemoglobin (SpCO®), methemoglobin (SpMet®), pleth variability index (PVI®), oxyhemoglobin (SpO₂), perfusion index (PI), and pulse rate (PR)—facilitating early detection and treatment of potentially life-threatening conditions.
- In 2009, Masimo introduced Masimo Rainbow SET® Acoustic Monitoring™, the first-ever noninvasive and continuous monitoring of acoustic respiration rate (RRa™).

Over the last 20 years, Mr. Kiani and Masimo have helped to solve the "unsolvable" problems that have plagued patient monitoring within the healthcare industry, building a substantial intellectual property portfolio with over 575 issued and pending patents worldwide relating to signal processing, sensors, and patient monitoring, including the inventions of motion and low perfusion tolerant pulse oximetry and Pulse CO-Oximetry™ and garnering more than 65 awards and industry honors in the process.

Mr. Kiani has a B.S. in Electrical Engineering and an M.S. in Electrical Engineering from San Diego State University.