Lessons from 15 Years of Medical Robotics Research

ABSTRACT
The field of robotics has had a resurgence over the past 2 decades, seeing new sub-fields and application areas emerge. One important application area is medical robotics, where the convergence of engineering and medical knowledge can be applied quite fruitfully. In this talk, examples of projects spanning the last 15 years are summarized, including surgical and rehabilitation robotics. With the benefit of hindsight on these projects, several lessons or guidelines for effective innovation in medical robotics are offered.

BIOGRAPHY
Dr. Carl Nelson is a professor in the Department of Mechanical and Materials Engineering at the University of Nebraska-Lincoln, where he has worked since 2005. Prior to that, he received the MS and PhD degrees from Purdue University and the BS degree from the University of Oklahoma, all in mechanical engineering. His research interests include robotics, mechanical design, and medical robots and devices.

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