Medical Device Development And Clinical Trials "Good, Bad and Ugly"

With the advent of MIS (Minimal Invasive Surgery) in the last two decade, an explosion of bio-medical engineering leading to medical device discoveries occurred in virtually all aspects of the conventional surgical approaches. The break-throughs were economically driven against the rising medical costs and diminishing health insurance money to support prolonged hospitalization and medications. Thus new and exciting catheter-based instruments have been discovered and approved for human use following aggressive preclinical and clinical trial in USA. These discoveries have directly affected not only the economics but the general health of the patients in terms of hospital stay, pain management, post-surgical scarring etc.

This presentation will discuss the various steps in bio-medical engineering leading to medical device development, animal modeling and cadaver testing for efficacy and safety. Further, the presentation will discuss and illustrate an ideal physician's training facility where doctors can be trained in the use of the latest medical devices.



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Narayan Raju was born in Fiji and educated in India, Australia and the United States. Raju is a board certified veterinary pathologist specializing in toxicologic pathology, biotechnology, bio-medical engineering, medical device testing, animal modeling and physician's training. Currently, Raju is the director of Pathology Research Laboratory, Inc. a San Francisco based pathology consulting company. During his tenure, Raju has worked for major biotech and pharmaceutical companies in USA and abroad. Raju has published over 50 scientific research papers and abstracts in peer reviewed journals.