

Biomedical Engineering Seminar

Image Guided Surgery

Meraj A. Khan

BrainLAB Inc.

Thursday, April 3rd, 2003

United Technologies Building, Room 150

5-6 pm

Abstract:

BrainLAB develops and distributes software and integrated solutions worldwide that enable minimally invasive therapies in medicine. In partnership with leading physicians, more than 430 BrainLAB employees work every day toward one goal: the creation and enhancement of clinical solutions that improve quality of life for patients everywhere.

Many surgical procedures currently enhanced with Image-Guided Surgery have historically been performed without it. Today, the trend in most surgical procedures is towards reduced invasiveness, which is made possible by the application of Image-Guided Surgery. For example, in coming years orthopedic surgeons are expected to more fully exploit the capabilities of advanced Image-Guided Surgery, enabling their implants to be positioned through small incisions. In contrast to the highly invasive procedures performed today, such techniques will allow patients who undergo these surgeries to go home the same day. The advantages for patients and medical facilities are obvious, and their recognition of such will lead to significant increases in the percentage of procedures and institutions where Image-Guided Surgery is utilized.

Meraj Khan received a Bachelors Degree in Bioengineering from the University of Illinois at Champaign-Urbana in 2000. Conducted "Liposome Technology" research in the Magnetic Resonance Engineering Laboratory under Professor Dr. Andrew Webb at the Beckman Institute for Advanced Sciences and Technology. Continued to graduate school at the University of Connecticut -- Storrs, BME Masters Program. Conducted extensive research with Dr. John Enderle on the Human Eye Movement System, focusing on the static and dynamic properties of muscle.