Computer-Assisted Surgery

There have been many advances in Orthopedic surgery in recent years. One exciting advance has been the research and development of computer-assisted total joint replacement. This cutting-edge technology is designed to assist your surgeon in more precise alignment and function of an artificial joint. These devices use an infrared beam that communicates with surgical instruments and a computer in the operating room to measure the patient's normal anatomy and angles of the knee and hip joints, so that, a more precise operation can be completed. This technology is in its infancy and future developments are expected in the next few years. For sample videos of this revolutionary process please refer to the following links:

Video Demonstrations

- **This infrared beam is registering the patient’s normal anatomy and angles of the knee joint.**

- **The computer is outlining the shape of the bones of the knee joint.**

- **This infrared camera is communicating with the computer regarding the patient’s anatomy.**

- **The computer is assisting the surgeon with ideal placement of the surgical guides.**