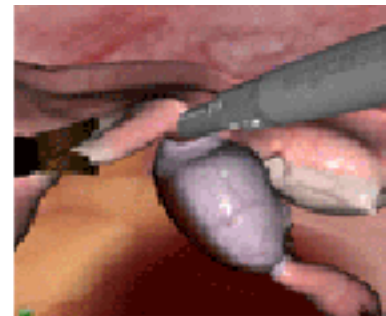
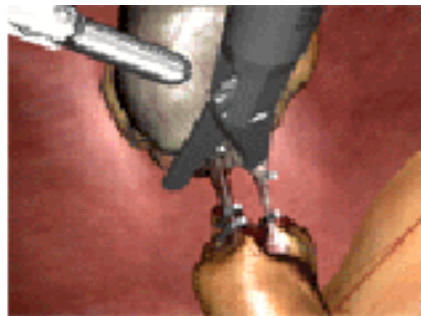
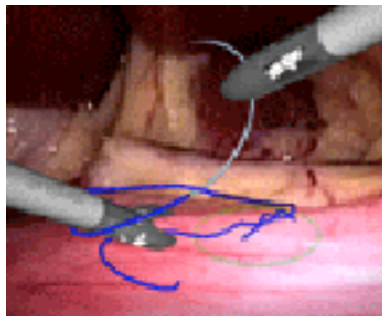
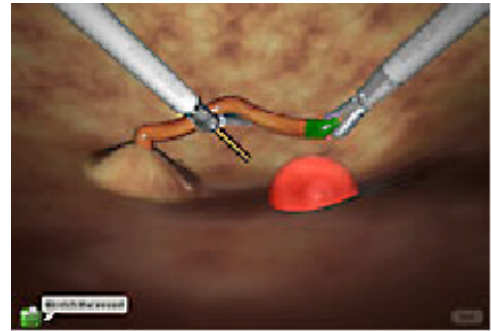

The *LapSim* Basic Skills Simulator: Learning the Fundamental Gestures and Manipulations of Laparoscopic Surgery

Project Overview

Surgical skills must no longer be learnt by first observing and assisting surgeons operate on their patients. Surgical education begins with instruction in lectures, from books, atlases, and videotapes of surgery. Basic skills are learned and practiced on realistic, deformable, plastic models, and in many places including the U.S., on anesthetized animals. Augmenting surgical training with simulation offers great promise because maneuvers can be practiced over and over until mastered. By introducing the few fundamental surgical manipulations used by surgeons everywhere, and instructing novice surgeons in how they are choreographed together to conduct a full surgical procedure, efficiency and safety are enhanced. The *LapSim* Trainer teaches both basic skills and critical steps of four procedures in general or gynecological surgery.



Project Status

In a Simulation Lab-to-Operating Room study, medical students were trained on the *LapSim* Trainer, on a standard “box” trainer, or had no training before going to animal surgery where they were supervised in performing the same ‘tasks’. *LapSim* – trained students were more proficient and made fewer errors, and thus were better prepared to assist during surgery.

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Project Team

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Corporate Support

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