Haptic Interface for Surgical Manipulator

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Goals:

• Create an intuitive control interface for the JHU/APL snake manipulator
• Integrate force feedback

Significance:

• Traditional total hip arthroplasty procedures cover <50% of lesion
• With control method for snake, may help decrease OR time, exposure to radiation, increase volume coverage

Results:

• Initial trials inconclusive but preliminary trials with improved system showed decreased task completion time, higher accuracy with PHANTOM® Premium haptic device
Touching Targets with Manipulator