The National Institute of Health has awarded the Advanced Robotics and Mechanism Applications (ARMA) a two year grant for exploratory research on use of snake-like robots for resection of bladder cancer tumors. This research is lead by Dr. Nabil Simaan (department of Mechanical Engineering) and Dr. Duke S. Herrell (Department of Urology).

This project focuses on enabling higher precision, safer, and more dexterous resection and surveillance of bladder tumors. Current surgical tool limitations hinder accurate and complete tumor resections and visualization; result in improper staging and increase rates of perforations and tumor recurrence. The proposed technology will reduce surgeon burden, improve resection accuracy, and hopefully reduce recurrence rates, trauma, and patient treatment cost.

See the following page for details on this interdisciplinary research project.