Researchers at the University of South Florida have created a durable surgical model of the vaginal cuff and uterosacral ligaments for use in training surgeons how to properly close the vaginal cuff to prevent prolapse after traditional and total laparoscopic hysterectomy (TLH).

Vaginal prolapse is a common problem encountered after hysterectomies because of weakened ligamentous support. Therefore, the surgeon needs to be able to properly secure the vaginal cuff to those ligaments in order to reduce the risk of vaginal prolapse.

There are surgical techniques and devices to treat vaginal prolapse after it has already occurred, such as sacrocolpopexy and pessaries. However, for many women with vaginal prolapse after hysterectomy, the problem may have occurred because the surgeon did not properly attach the ligaments to the vaginal cuff during the initial procedure, making surgeon training the most important prevention method for reducing the incidence of vaginal prolapse post hysterectomy.

USF inventors’ have developed a simulated vaginal cuff with uterosacral ligaments to overcome the shortcomings of previous training tools for teaching closure of the vaginal cuff after TLH. The uterosacral ligaments extend from the lateral angles of the vaginal cuff, simulating the natural anatomical relationship seen in surgery. The silicone cuff and ligaments have a mesh incorporated for enhanced durability, and there are suction cups on the aluminum base to prevent movement of the trainer during suturing.