FEATURED PROFILE

Amanda Patterson

Dr. Amanda Patterson's findings could lead to better outcomes following pregnancy.

The uterus drastically remodels itself during pregnancy — and afterward, its tissue must be repaired. Patterson investigates this repair process in both animals and women. Reflecting her expertise, she has a dual appointment in the Division of Animal Sciences and the Department of Obstetrics, Gynecology and Women's Health.

In her lab, Patterson focuses on the role of stem cells in human uterine repair. While useful, these cells are also thought to cause benign tumors, called fibroids, that can impair day-to-day functioning in women. Currently, the only treatment is a hysterectomy. A better understanding of how fibroids form could point the way to more options.

Additionally, Patterson studies factors that lead to the development of bovine endometritis, a post-pregnancy bacterial infection that causes inflammation. Among cattle with the illness, the uterus is not properly repaired. Patterson works to uncover whether the infection halts repair, or whether an improper repair process allows the bacteria to take hold.

Patterson also helps train the next generation of reproductive scientists. She guides undergraduate and graduate students who are conducting research projects.

Dr. Amanda Patterson is an assistant professor with appointments in the College of Agriculture, Food and Natural Resources and the School of Medicine.