Advice for Life

"If they don’t get funded, the science isn’t going to get done.”

JOSE TEIXEIRA, PH.D., A PROFESSOR IN THE DEPARTMENT OF OBSTETRICS, GYNECOLOGY AND REPRODUCTIVE BIOLOGY WHO OVERSEES DR. AMANDA PATTERSON’S WORK IN HIS GRAND RAPIDS LABORATORY

MSU College of Human Medicine researcher Dr. Amanda Patterson received an F32 National Research Service Award from the NIH to research the possible role adult stem cells play in the formation of uterine fibroid tumors.

(Submitted photo)

MSU COLLEGE OF HUMAN MEDICINE

MSU researcher awarded fellowship to study infertility

The competition was tough, but Amanda Patterson, a College of Human Medicine postdoctoral researcher, has won a prestigious National Institutes of Health fellowship to study one of the leading causes of infertility in women.

With NIH funding, Patterson will spend three years researching the possible role adult stem cells play in the formation of uterine fibroid tumors.

She is the only researcher in the College of Human Medicine and among only four at MSU working under F32 National Research Service Awards from the NIH.

NIH created the F32 fellowships to recognize and encourage the next generation of researchers, said Jose Teixeira, Ph.D., a professor in the Department of Obstetrics, Gynecology and Reproductive Biology who oversees Patterson’s work in the Grand Rapids laboratory. “They’re very competitive,” Teixeira said, adding such funding is critical to the future of medical research, because without financial support, many promising, young scientists might leave the field.

“If they don’t get funded, the science isn’t going to get done,” he said, “and we might be missing out on some important breakthroughs.”

Uterine fibroid tumors, although noninvasive, can be very painful, can cause heavy menstrual bleeding, and are the most common reason women undergo hysterectomy, said Patterson, who has a Ph.D. from Washington State University in animal science and reproductive biology.

Hysterectomy is not an acceptable option for many women, since the tumors most commonly occur in women of childbearing age, she said.

Drugs prescribed to treat fibroid tumors shut down hormonal production, essentially causing early menopause.

Teixeira estimated one-third of white women and 75 percent of black women have fibroid tumors at some point in their lives.

In addition to the discomfort endured by millions of women, the tumors come with a cost to the U.S. economy. One study estimated that fibroid tumors account for as much as $34 billion a year in lost productivity and medical expenses.

Patterson’s research focuses on an adult stem cell and a gene she has identified as a potential trigger for the tumors.

Finding a specific cause of fibroid tumors might suggest ways of treating or preventing them, thus, helping women avoid hysterectomies, she said.