

“When I use the surgical robot I am able to operate with great precision. I also have an increased range of motion, improved dexterity and enhanced visualization.”

Sunny Zhang, MD, PhD  
Ob-Gyn Associates, P.C.

## Robotic surgery helps couple conceive

When Kim McGraw, 33, had her son Chase, five years ago the mother of four was done having children. She asked her doctor to perform a tubal ligation after her C-section. Tubal ligation is also known as getting one's tubes tied or female sterilization.

Fast forward to the present and McGraw is visibly pregnant expecting her fifth child this month.

“I had a reverse tubal ligation last summer,” said McGraw. “In the last five years a lot has changed in my life. I got a divorce and I met my husband Brian. We decided we wanted to have a child.”

McGraw started researching the surgery before she and Brian got married. She contacted Sunny Zhang, MD, PhD, Ob-Gyn Associates, P.C., to explore her options.

“Dr. Zhang delivered Chase and tied my tubes,” said McGraw. “Since she did the original surgery she knew she could perform a reverse tubal ligation because she had removed a small section of my fallopian tubes.”

Every year, more than 700,000 women undergo tubal ligation in the U.S. This is meant to be 100 percent permanent birth control. Of the women who undergo this procedure approximately four to 10 percent regret the decision and about one percent will decide to undergo reverse tubal ligation surgery.

### Reverse tubal ligation

“Reverse tubal ligation surgery rejoins the remaining sections of the fallopian tubes,” said Dr. Zhang. “This procedure is not for

everyone. For instance a woman who had the Essure procedure is not able to reverse the procedure. The Essure procedure involves inserting a coil into each fallopian tube and once that is done, scar tissue forms around the device blocking the tube. Also, women who don't have enough of their fallopian tube left after a tubal ligation are not candidates, these things coupled with the woman's age, plus other fertility factors may adversely affect whether a woman has a chance to conceive after a reverse tubal ligation.”

According to Dr. Zhang the success rate for a reverse tubal ligation is about 80 percent.

“I did a lot of research about this procedure,” said McGraw. “Insurance doesn't typically pay for this procedure but despite

this – Brian and I knew it was something we really wanted to do. We really wanted to have a child together and I had the surgery two months after our wedding.”

### Robotic surgery

Reverse tubal ligation is done as an outpatient surgery – meaning McGraw didn't have to spend the night in the hospital. Dr. Zhang uses the surgical robot at St. Luke's for this procedure. Always looking to stay on the cutting edge of technology St. Luke's was the first hospital in Cedar Rapids to acquire robotic surgery equipment in 2005. To date there have been nearly 600 surgeries at St. Luke's Hospital using the surgical robot. St. Luke's is Iowa's robotic leader, which means St. Luke's has performed more robotic surgery procedures than any other hospital in the state.

“Until I had my surgery I had not heard of robotic surgery,” said McGraw. “When Dr. Zhang said she was going to use it for my reverse tubal ligation I did more research. I learned it would greatly reduce my recovery time because the incisions were smaller and also I would experience less pain. I wasn't scared but rather delighted that Dr. Zhang was going to be using the surgical robot.”

“When I use the surgical robot I am able to operate with great surgical precision,” said Dr. Zhang. “I also have an increased range of motion, improved dexterity and

enhanced visualization. Benefits experienced by patients may include less pain, less risk of infection, less blood loss, less scarring, faster recovery and a quicker return to normal daily activities.”

### Recovery

McGraw had the procedure in July. The surgery took a little over two hours and Dr. Zhang made four dime-sized incisions. This is in contrast to the larger incisions used in traditional, open surgery, which can be as large as six to 12 inches long. McGraw was out of the hospital and relaxing in her own home just a short time after her surgery.

“The recovery was not bad at all,” said McGraw. “I was feeling fine within a couple of days. I was told to take it easy for several days and not overdo it.”

“I tell patients they can return to work within two to three days of the procedure,” said Dr. Zhang. “Patients have no restrictions and they may try to conceive two months after surgery.”

“We learned we were expecting eight months after I had the procedure,” said McGraw. “Brian and I are so glad we did this. We can't wait to welcome our daughter, Olyvia. Her siblings can't wait for her to arrive. They ask us everyday how much longer until she is born. Our younger boys don't understand what is taking so long.”

■ To learn more about robotic surgery or why St. Luke's is Iowa's Robotic Leader log onto [stlukescr.org](http://stlukescr.org).

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Kim McGraw shows off her daughter's room.