

Baby orangutan born at Tampa's Busch Gardens via C-section is a rare feat

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Luna loved the ultrasound game. The 26-year-old orangutan at Busch Gardens would come up to the mesh screening that separates the primates from the humans that care for them and happily present her

belly.

Dr. Maria Spriggs, chief veterinarian at Busch Gardens, would use that play time to put an ultrasound probe on Luna's belly and track the progress of her pregnancy.

"She really liked to eat the ultrasound gel. She thinks that's really fun," Spriggs said.

Luna gave birth to a female baby orangutan April 13 at the Tampa theme park. It was a rare—if not historic—event: There have only been 11 [cesarean sections](#) in the past 20 years of orangutan births in American zoos, out of 139 births of the critically endangered species, according to the Association of Zoos & Aquariums.

A team of nearly two dozen [medical professionals](#) were called in for Luna's delivery—not just veterinary but also human doctors who specialize in maternity and newborn care.

They recounted their stories of a remarkable day in the theme park's Animal Care Center when they saved a baby using tools from the maternity ward.

Because humans and great apes are so alike in biology, the theme park called on Dr. Catherine Lynch, a well-regarded Tampa obstetrician-gynecologist, to look at the snapshots they were able to catch from ultrasounds.

On a visit in early April, she was alarmed. The baby was breech, lying bottom-down instead of head-down in the uterus. And, even more alarming, the umbilical chord was underneath her.

"If that had come out first, that would have been catastrophic to the

baby," cutting off her oxygen supply, Lynch said.

Lynch, who practices at Tampa General Hospital and also teaches medical students at the University of South Florida, has since the late 1990s assisted in monitoring the pregnant primates at Busch Gardens.

"They have a remarkably similar uterus" to humans, she said.

For safety's sake, Spriggs couldn't put her hand in the enclosure during ultrasounds, so the images were more like snapshots.

"That's where partnering with Dr. Lynch at USF has been key to our prenatal monitoring, because she sees these images all the time," Spriggs said.

Upon seeing the breech danger, Lynch scheduled a C-section, just like she would have with her human patients, timing it as close to the delivery date as possible.

This wasn't the doctor's first great ape delivery. Lynch, who is the wife of former Tampa Mayor Bob Buckhorn, has for decades helped with animal wellness checks, which are similar to a woman's annual pelvic exam.

"Once you start to look at things with the ultrasound you go, 'Yep, there's the uterus.' It looks the same," Lynch said. "It's very different from a pig uterus or a dog uterus."

In 2003, she was called in to assist another orangutan. After 40 hours of labor, the delivery wasn't making progress and the exhausted animal was moaning in distress.

"They sedated her and we assembled a team and we didn't know whether

the baby was going to be dead or alive," Lynch said. They treated it like a typical C-section surgery, and delivered a healthy baby.

Two years after that, one of the park's original gorillas had gotten pregnant, but was bleeding. Lynch identified it as placenta previa, which can cause severe bleeding during labor and can put mother and baby in danger. She again oversaw a successful C-section.

This year's birth wasn't even the first time Luna needed Lynch and Spriggs to get her through labor. Luna had a previous pregnancy in 2017, and appeared to be progressing well on her own while delivering the baby. But Lynch was called in when keepers noticed Luna was fully dilated and crowning, but seemed confused about what to do next for the delivery.

"So literally one of the keepers and I were down on the floor in the orangutan house demonstrating for her to grab her feet and reassure her that the baby was going to come out," Lynch said. "We were down there showing her what to do and she mimicked what we did. And then the baby came out.

"So add 'Doula to the Great Apes' to my resume."

They were hoping Luna would deliver normally again this time, but the baby didn't change into the head-down position. Lynch showed up April 13 for an ultrasound check, expecting to schedule a C-section for the following Thursday. But Luna was extremely restless and agitated, her keepers said, a possible indication she was going into labor.

Lynch sounded the alarm and a team of anesthesia specialists from the University of Florida, obstetrics and neonatology teams from Tampa General Hospital and Busch Gardens veterinarians filled the park's Animal Care Center.

Anesthesia was administered at 4:30 p.m. that Saturday for what would end up being 90 minutes of tension.

The medical specialists were divided into Team Luna, to take care of labor, delivery and recovery, and Team Baby, to take over after the birth. For the newborn, they had to get the heart rate, breathing and temperature in balance—and they had to wake the baby up, since the mother had been heavily sedated.

A C-section is a fairly quick surgery, Lynch said, though with the baby in the breech position it took a little wiggling to get her out of the mother's cavity and through the incision, "especially when you have arms that are significantly longer than human arms."

When the baby came out at 6:08 p.m., there was a spontaneous cheer in the operating room. The little one was handed off to Team Baby, while Team Luna took over dressing Luna's wounds, using internal stitches so the orangutan wouldn't be tempted to pick at them later.

Dr. Tara Randis, chief of USF's Division of Neonatology who also practices at TGH, had her typical team of nurses and residents on hand that she would have for any high-risk pregnancy.

Because Luna had to be sedated, the baby emerged from the womb fully conked out. Though 3.4 pounds is small for a human baby, it is a normal size for an infant orangutan, Spriggs said. They suctioned out her airway because she was not breathing right away and put in a breathing tube. They gave her a shot in the leg, supplied by the veterinarians, to wake her up and reverse the anesthesia.

She was cold, so they wrapped her in warming blankets, monitored her [heart rate](#) and kept her breathing with the tube.

Then the baby performed that adorable reflex all newborns do: Her long fingers emerged from under the warming blankets and grasped the finger of her doctor. And since orangutans are five to seven times stronger than humans, Randis said, "That was one very strong grip." The baby then kept reaching and grasping and grabbed the fingers of all three team members, who let out a cheer of their own.

The following days were spent healing both animals with the goal of getting them back together. The neonatologists stressed that "skin-to-skin" contact and nursing were critical in the bonding process.

Within a few days, mother and child were reunited, and in a heartwarming video posted on social media, Luna can be seen looming large over the tiny newborn, gently lifting her up out of a nest of hay and laying the baby on her shoulder. The baby immediately grips her mother's long facial hair as Luna gently pats her back. They are bonding and doing well, her keepers report.

"It's really remarkable how similar this is," said Randis, who had never participated in a zoo exercise like this. "It reinforced how important the basic things we do to encourage bonding, care and attention are. That nursing, and recognizing the needs of both of them, is the most important part of what we do."

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