

## CELEBRATING THE BIRTH OF OUR 1,000TH FETAL SURGERY PATIENT



Audrey Rose Oberio made history just by being born. Audrey, whose birth marked the Hospital's 1,000th fetal surgery patient, was born to Jackie and Gideon Oberio of Maryland.

CHOP's [Center for Fetal Diagnosis and Treatment](#) gave the Oberio family new hope and optimism for their baby's future. The Center's internationally renowned specialists treat the full range of fetal anomalies through highly complex surgical interventions to repair birth defects in the womb, changing outcomes for many children before they are even born.

The Center leads the way in fetal surgeries around the world. Approximately 4,000 fetal surgeries have been conducted worldwide, which means a quarter of them have been performed at CHOP, the largest number of any hospital in the world. The Center is firmly established at the forefront in providing and advancing fetal therapy, widely recognized as one of the most promising fields in pediatric medicine.

When Jackie Oberio was 19 weeks pregnant, the couple learned their unborn daughter had myelomeningocele, the most severe form of spina bifida, a condition in which part of the developing spine fails to close properly. With conventional postnatal surgery, myelomeningocele can still result in lifelong disabilities, including paralysis, bladder and bowel problems, and cognitive impairments.

After talking to local specialists and doing online research, the Oberios discovered that the Center for Fetal Diagnosis and Treatment pioneered a surgical procedure to repair spina bifida before birth. The Center's team of physicians found that addressing spina bifida by operating on the baby in the womb, months before birth, could reduce the need to divert fluid from the brain, improve neurologic function, and increase the likelihood that a child would be able to walk independently.

When she was born post-surgery, Audrey Rose weighed 5 pounds, 8 ounces, and had nothing more than a scar where her doctors had operated.

"Although birth defects remain the leading cause of infant mortality in the United States, we have been able to develop and share innovations that help advance treatment for these defects, relying on tools, techniques and experience not available 30 years ago," said [N. Scott Adzick, MD](#), the Medical Director of the Center for Fetal Diagnosis and Treatment at CHOP, where he is also Surgeon-in-Chief.

Established by Dr. Adzick in 1995, the Center is now the largest and most comprehensive fetal program in the world, having welcomed nearly 15,000 expectant mothers from all 50 states and more than 50 countries. Each week at CHOP, highly sophisticated surgical teams repair spina bifida and other birth defects in the womb, place fetal shunts to treat life-threatening congenital conditions, or perform minimally invasive procedures in the mother's uterus to treat complications in fetal twins. The Center staff also manages pregnancies complicated by birth defects, in which newborns need immediate specialized medical care or surgery after delivery.

In 2011, Dr. Adzick and his team published the results of more than two decades of research in the *New England Journal of Medicine* that showed fetal surgery can significantly improve the outcomes for children diagnosed in utero with spina bifida. Their study demonstrated that two and a half years after fetal surgery children with spina bifida were better able to walk when compared to children who received surgery shortly after birth, and patients who received fetal surgery scored better on tests of motor function.

"It's very gratifying to take this idea forward over 30 years, starting with a concept and now offering hope — to families, mothers, and the children themselves," said Dr. Adzick.