

“UConn Animal Science Research Leads To First Baby Born From a Human Uterine Transplant”

In September of 2014, Dr. Mats Brännström successfully delivered a baby from a woman who had received a uterine transplant. This was the first birth from a transplanted uterus and it was the culmination of years of research that included studies on mice, sheep, baboons and finally human subjects. Dr. McCracken, Professor-in-Residence in the UConn Department of Animal Science, collaborated with Dr. Brännström in 2006 both here at UConn and in Sweden on perfecting the procedure for uterine transplantation in sheep. Dr. Brännström believes that the success of the sheep model was essential in the inspiration for the human studies and consequently the first child born to a mother with a uterine transplant. Dr. McCracken summarizes his relationship with Dr. Brännström and his role in transplantation studies below:

“I first met Mats Brännström at a scientific conference in 2005 after I had presented our studies on uterine transplantation in sheep. He contacted me after my presentation and told me that his goal was to transplant the uterus in women and could he come to UConn to learn how we did the surgery in sheep. He came over in January 2006 with his assistant Caiza. They stayed with me in Shewsbury and we traveled down to UConn each day to do sheep transplant surgery. Mats was astonished at how similar the pelvic vascular anatomy in the sheep was to the human, partly because we had developed techniques to gain excellent access to this area for our transplantation studies. He was so impressed with the sheep as a model that he invited me to Sweden later that year for ten days to do more uterine transplants. We did experiments there to cool down the excised uterus in cold saline for one hour to simulate what would be done for human uterine transplantation. We then re-transplanted the sheep uterus and measured the re-perfusion rate of blood flow which turned out to be excellent. We published a paper on these studies in the sheep in 2008 after Mats had carried out some additional uterine transplants in sheep. Because of the success with the sheep model, he was able to get permission to carry out studies in the baboon as a primate model. These studies were so successful that he obtained permission to attempt uterine transplantation in the human which culminated in 2012 with his remarkable success in two women who received their new uterus from their respective mothers. In October of this year, he announced the first ever birth of a baby boy from one of his uterine transplant patients which was even more remarkable because the donor of the uterus was a post-menopausal woman.”

More information on the birth, please visit <http://www.bbc.com/news/health-29485996>.

The original study that Dr. McCracken contributed to can be found at <http://onlinelibrary.wiley.com/doi/10.1111/j.1447-0756.2008.00854.x/full>.

The human-based study can be found at <http://www.sciencedirect.com/science/article/pii/S0140673614617281>.

More information on Dr. McCracken’s work at UConn can be found [here](#).