Transformative research

In addition to medical and life-saving surgical expertise, our physicians also lead groundbreaking research that offers the promise to transform health care.

UC Davis researchers are currently investigating how in-utero surgery combined with stem cell therapy may help improve motor function for patients with spina bifida – allowing them to walk independently.

UC Davis researchers are also investigating other novel uses for stem cells including regenerating tissues for use in repair. These are just a couple of the research efforts currently underway or planned for the future.

Appointments and referrals

Patients and family members can contact the UC Davis Fetal Care and Treatment Center team at 916-794-BABY (916-794-2229).

Most specialists at UC Davis require a referral from a primary care provider, a specialist in the community or a UC Davis provider. For information on the referral process, contact the UC Davis Resource Center at 800-2-UCDAVIS (800-282-3284).

Physicians referring a patient to the UC Davis Fetal Care and Treatment Center may call 916-794-BABY (916-794-2229) to initiate the referral process.
UC Davis is home to a highly-specialized, comprehensive and multidisciplinary fetal diagnosis and therapy center serving inland Northern California.

This level of world-class care is only available at a handful of hospitals nationwide. Now patients, in the Sacramento region and beyond can benefit from advances in fetal surgery and maternal-fetal medicine, close to home.

The UC Davis Fetal Care and Treatment Center combines the expertise of nationally and internationally renowned specialists in obstetrics and gynecology, surgery and pediatrics who are leaders in fetal diagnostics and intervention, including both surgical and nonsurgical therapies.

Fetal health services

Our maternal-fetal medicine specialists offer a comprehensive range of consultative and diagnostic services, including:

Consultative services
- Genetic counseling
- High-risk prenatal care (including twins or multiples, diabetes and obesity)

Diagnostic services
- Prenatal testing
- High-resolution imaging including ultrasound and MRI
- Placental assessment including management of placenta previa, placenta accreta or fetal growth disorders

Conditions treated before birth

Fetal or prenatal surgery can offer hope of correcting or minimizing a variety of life-threatening or potentially disabling conditions affecting the fetus, helping to both facilitate a safe delivery while protecting the health of the mother.

Some of the conditions that the UC Davis Fetal Care and Treatment Center experts can diagnose and treat conditions include:
- Spina bifida (myelomeningocele)
- Twin-to-twin transfusion syndrome
- Congenital pulmonary airway malformation (CPAM/CCAM)
- Congenital diaphragmatic hernia
- Congenital high airway obstruction (CHAOS)
- Neck masses
- Lower urinary tract obstruction (LUTO)
- Ex-utero intrapartum treatment (EXIT) procedure
- Gastrochisis
- Sacrococcygeal teratoma
- Twin reversed arterial perfusion syndrome
- Amniotic band syndrome

Types of surgeries and interventions

The types of surgical and non-surgical treatments performed by the experts at the UC Davis Fetal Care and Treatment Center include:

- Open fetal surgery, which operates on mother and fetus via an open incision on both. This method is used before birth for conditions such as spina bifida and for specific tumors.
- Fetoscopic surgery uses an endoscope to view the fetus during surgery. A small incision is made to insert and manipulate instruments. For example, the team can employ an endoscope with a laser to treat twin-to-twin transfusion syndrome.
- Image guided surgery uses ultrasound to guide needle-based interventions for fetuses in need.
- Ex-utero intrapartum treatment (EXIT) procedure, a surgical intervention at the time of birth most often used to repair respiratory conditions such as airway compression or abnormal lung masses. The fetus is partially removed from the mother and undergoes surgery while still attached to the umbilical cord.