Caring for children is a calling in life. River Oaks resident, pediatric neurosurgeon Dr. David F. Bauer feels honored to care for children with rare and complex problems such as scoliosis, spinal tumors and deformities of the face and skull.

It is such a privilege to work at Texas Children’s Hospital. Patients come from across the United States and from many parts of the world to receive the advanced specialty care that we provide. We have the latest technology and the best support teams, which allow us to achieve our surgical goals while minimizing risk to our patients. The most rewarding part of my work is seeing the joy a family has after a child undergoes a successful, life changing surgery.

A large part of my practice is taking care of children with scoliosis or other deformities of the spine. Bracing and scoliosis-specific physiotherapy is proven to improve mild scoliosis. We use these therapies whenever possible in order to keep many patients from needing future surgery. Children and teens with more serious scoliosis, however, often need surgery to correct the curvature of the spine in order to prevent it from becoming much worse over time. By using advanced technology such as spine navigation and intraoperative CT Scans we can treat scoliosis more safely while achieving a superb cosmetic result. Safety during surgery is of utmost importance to us. We constantly monitor a child’s spinal cord and nerves to insure the safest surgery possible.

I also specialize in treating tumors of the spine, including spinal column and spinal cord tumors. These tumors are rare. Treatment usually means removing the tumor, possibly reconstructing the spine. Patients often need to follow surgery with radiation and chemotherapy for the best outcomes. We have had significant success with complete removal of spinal cord tumors using our team approach to treatment and care alongside our specialized technology.

Finally, I co-direct the Texas Children’s Craniofacial Surgery Program with a team of plastic surgeons. We treat the entire spectrum – from common to extremely rare – disorders of the face and skull that can cause skull malformation and elevated pressure inside an infant’s brain. Treatment can include minimally invasive bone removal surgery with post-operative helmet therapy up to larger surgeries remodeling a child’s skull.

At Texas Children’s, we are constantly innovating, trying to achieve difficult surgical goals while prioritizing patient safety. Our team is always trying to improve our care and surgical technique, every time we operate on a child. Surgical excellence is based on skill and teamwork, however innovation requires a research team and independent funding. My research team is currently evaluating many of our standard treatments for brain and spine disorders in order to develop improved or better treatments for the future.

My team is always looking for support to help us further innovate and better treat children with both common and rare and complex skull and spinal disorders. Please reach out to Dr. Bauer at dfbauer@texaschildrens.org to learn more or to potentially help fund a need to support research in childhood disorders of the skull and spine.