

NEUROSURGERY

PHILOSOPHY

Our highly experienced, board certified pediatric neurosurgeons provide innovative and efficient care to improve the quality of life for children and their families. While every effort is made for nonsurgical intervention, neurosurgery can often be the answer to saving or improving a child's life.

Our board-certified neurosurgeons bring the highest levels of expertise and experience to even the most complex disorders of the brain, spine and central and peripheral nervous systems. We are pioneers in some of the most innovative neurosurgery procedures, including minimally invasive ablation of intracranial tumors and epileptogenic lesions, temporal sclerosis and radiation necrosis; endoscopic removal of brain tumors and cysts; cranial remodeling; and treatments for traumatic brain injuries. We were the first in Orange County to perform an endoscopic third ventriculotomy and among the first to offer unique treatments such as baclofen pumps for spasticity and vagus nerve stimulation for seizures.

WHAT WE TREAT

- Basilar invagination syndrome
- Birth defects
- Brachial plexus nerve damage
- Brain cysts
- Brain tumors and infections
- Brain and spine anomalies
- Cerebellar Herniation Syndrome
- Cerebral palsy and spasticity
- Concussion and head/spinal cord trauma
- Congenital and acquired brain anomalies
- Cranial anomalies
- Craniosynostosis
- Epilepsy, with surgical alternative
- Hydrocephalus
- Infants with abnormal head size



- Moyamoya disease
- Plagiocephaly
- Sacral dimples
- Spina bifida
- Spinal anomalies
- Spinal dermal sinuses
- Spinal instability
- Spinal osteomyelitis
- Tumors of the brain and spine
- Vascular brain anomalies

PROGRAMS AND SERVICES

- Brachial Plexus Program
- Comprehensive Epilepsy Program
- Concussion Clinic
- Maternal fetal evaluation
- Neurofibromatosis Program
- Neuro-oncology Treatment Program
- Plagiocephaly Program
- Spasticity Clinic
- Spina Bifida Clinic
- Tuberous Sclerosis Clinic

NEUROSURGERY

OUTPATIENT SERVICES OFFERED

- Misshapen head clinic
- Evaluation of infants with large heads, small heads, misshapen heads
- In-office ultrasounds
- Plagiocephaly clinic
- Prenatal counseling for parents regarding fetal anomalies
- Second opinion for all pediatric neurosurgery issues

MAIN OFFICE

CHOC Children's Specialists Neurosurgery

St. Joseph Medical Tower

1010 W. La Veta Ave., Suite 710

Orange, CA 92868

Scheduling: 714-509-7070

Fax: 714-509-7074

SPECIALTY CARE PHYSICIAN CONCIERGE SERVICE

Our physician concierge service expedites physician to physician communication with CHOC Specialists.

To connect with a physician concierge representative, please call 714-509-4013.

PINGMD®

Physicians are available via pingmd®, a secure HIPAA-compliant secure text messaging app. The app is available for free on Android and iOS devices.

Learn more about services at CHOC Children's at choc.org.



OUR TEAM

Leadership

Michael Muhonen, MD

Division Chief

Hydrocephalus, cerebral palsy, traumatic head injuries, spina bifida, brain tumors, Moyamoya disease, vascular malformations of the brain

Board-Certified Pediatric Neurosurgery Team

William Loudon, MD

Molecular characterization and novel therapeutic approaches for CNS malignancy, cancer stem cell biology, regenerative medicine, head injury, craniosynostosis, gamma knife

Joffre Olaya, MD

Brain/spine tumors, cerebrovascular lesions, Chiari malformations, neural tube defects, craniosynostosis, hydrocephalus, intractable epilepsy, movement disorders

Tony Adkins, PA