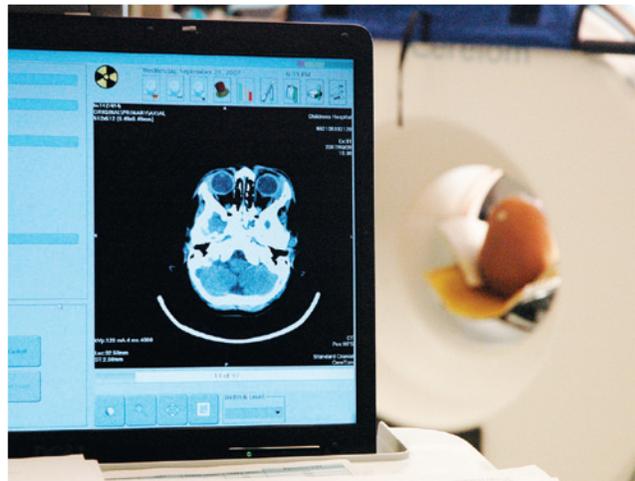


# Brain Tumors / Neuro-Oncology

Children's Hospital has one of California's largest pediatric brain tumor centers. We offer world-class care in a dedicated environment for children. Our unique multidisciplinary team includes the pediatric neurosurgery program members, as well as specialists from Oncology, Radiation Therapy, Neuropsychology, Neurophysiology, and other specialties.



CT scanner with real time imaging

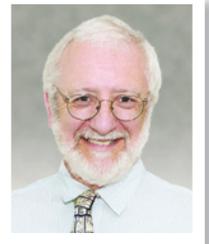


## PROCEDURES FOR TREATING BRAIN TUMORS

**Neurosurgery.** Successful brain tumor treatment usually begins with a skilled surgical resection to minimize risks to the brain and spinal cord. The neurosurgical operating room at Children's Hospital is equipped with state-of-the-art technology to monitor neurological functioning while the child is asleep. Surgeons employ dedicated ultrasound and intraoperative CT scanners for real-time imaging, with computer-assisted frameless navigation to maximize safety through the latest imaging techniques.

**Oncology.** Joe Torkildson, MD, and Caroline Hastings, MD, lead the medical oncology brain tumor treatment team, joined by Jonathan Finlay,

MD, a world-renowned neuro-oncologist from Childrens Hospital Los Angeles. We are the only pediatric medical center in northern California to offer the "Head Start" protocols designed by Dr. Finlay to avoid radiation in treating malignant brain tumors in young children.

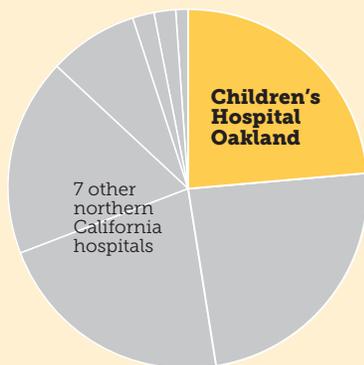


Dr. Finlay

**Radiation Therapy.** When radiation cannot be avoided, Patrick Swift, MD, and the staff of Alta Bates Comprehensive Cancer Center collaborate with the Children's Hospital physicians to offer skilled and meticulous radiation therapy. Our goal is always to optimize the chances for a cure, while minimizing potential side effects.

### INPATIENT BRAIN TUMOR CASES, 2009

Children's performed nearly a quarter of all of northern California's pediatric inpatient brain tumor surgeries in 2009.



Primary & Secondary Service Areas (Alameda, Contra Costa, Marin, San Francisco, San Joaquin, Santa Clara, Solano, Sonoma, Stanislaus); Ages 0-17; ©2010 Children's Hospital & Research Center Oakland

**Neuropsychology.** Brain tumors can affect a child's development; however, early recognition and expert intervention can help minimize any lasting effects. Board-certified neuropsychologists Seth Ubogy, MD, and Nicolle Ionascu, MD, use extensive tests and clinical observation to understand the child's cognitive development as a basis for treatment and educational planning. Psychologist Dina Hankin, PhD, works with families and school systems to help patients reach their developmental and educational potential.

**Other specialties.** The Children's Hospital staff includes a pediatric endocrinologist, physiatrist, neurologist, and ophthalmologist, all of whom are available to help care for our brain tumor patients, as needed.

### CASE STUDY: Madeline, 20

**Overview:** After Madeline turned 13, she suffered from double vision and peripheral field vision loss. Examination revealed a large tumor in her brain that was impinging on her optic nerve.

**Treatment:** Two surgeries and chemotherapy.

**Outcome:** Madeline is in remission and attending UC Berkeley with a major in engineering.

**Testimonial:** Marie Ziser, Madeline's mother, says, "I can't tell you enough nice things about Peter Sun. His abilities as a surgeon are second to none. Fifteen hours after her first surgery, she was actually doing crossword puzzles in the recovery room."

