



Marike Zwieneberg, M.D.

Philosophy of Care

Disorders affecting the brain and spine are often life-altering for patients and their families. Under these circumstances, selecting the optimal treatment strategy for a child is a complex decision process. As a neurosurgeon I strive to educate and empower parents to make these complex healthcare decisions so that they can best fulfill the needs of their child and family.

Clinical Interests

I specialize in pediatric neurosurgery with specific emphasis on the treatment of brain tumors, craniofacial disorders, epilepsy, spinal dysraphism, and traumatic brain injury. My research interests include studying the effects of injury to the developing brain and long term impact on neurological functioning. Current research projects include evaluation of the cognitive impact of radiation to the pediatric brain and amelioration of its effect by administration of oral selenium compounds. I am interested in the impact of moderate brain injury on the cognitive development of young children and teenagers. I am currently studying these effects in a pediatric brain injury model and am involved with the development of relevant injury models for the pediatric age group. Development of these models will allow us to better understand the pathophysiology of injury and develop more targeted future interventions.

Title Assistant Professor

Specialty Pediatric Neurological Surgery, Pediatrics

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Languages Dutch

Education M.D., Erasmus University Rotterdam, Rotterdam, 1997

Internships UC Davis Medical Center, Sacramento, California, 2001



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- Residency** UC Davis Medical Center, Sacramento, California, 2006
- Fellowships** St. Jude Children's Research Hospital/Le Bonheur Children's Medical Center, Memphis, Tennessee, 2006-07
- Board Certifications** American Board of Neurological Surgery, 2012
- Professional Memberships** American Association of Neurological Surgeons
Congress of Neurological Surgeons
Pediatric section of American Association of Neurological Surgeons
- Select Recent Publications** Kaufman BA, Matthews AE, Zwienenberg-Lee M and SM Lew. Spinal dural closure with nonpenetrating titanium clips in pediatric neurosurgery. *Journal of Neurosurgery (Pediatrics)*, 6(4): 359-363. 2010
- Utter GH, Shahlaie K, Zwienenberg-Lee M and JP Muizelaar. Anemia in the setting of traumatic brain injury: The arguments for and against liberal transfusion. *Journal of Neurotrauma*, 28: 155-165. 2010
- Sanford RA, Merchant TE, Zwienenberg-Lee M, Kun LE and FA Boop. Advances in surgical techniques for resection of childhood cerebellopontine angle ependymomas are key to survival. *Childs Nerv Syst*, 25: 1229-1240. 2009
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