

## **Dr. Zulma Tovar Spinoza**

Dr. Tovar-Spinoza obtained her MD degree at the Universidad de Los Andes Medical School, in Merida, Venezuela with Cum Laude honors. Dr. Tovar-Spinoza completed then, an internship in general surgery, trauma, and neurosurgery at the Hospital IVSS Patrocinio Penuela Ruiz in San Cristobal, Venezuela before entering the Rabin Medical Center Neurosurgery Training Program in Petach Tikva, University of Tel Aviv, Israel in 1997 under the supervision of Prof. Zvi Harry Rappaport. She was the first female resident accepted to this program.

Upon conclusion of her neurosurgical residency and her Board Certification by the Israeli Society of Neurological Surgery in 2005, Dr. Tovar-Spinoza completed fellowships in Pediatric Neurosurgery and Pediatric Epilepsy and Epilepsy surgery at the Hospital for Sick Children in Toronto, Canada under the supervision of Professors James Rutka, James Drake, and Carter Snead.

In 2009, she assumed her appointment as Director of Pediatric Neurosurgery at the Department of Neurosurgery at SUNY Upstate Medical University in Syracuse, becoming the first female faculty in the history of the Department. In 2015 she was promoted to Associate Professor in the Department of Neurosurgery and Pediatrics and most recently Associate Professor of Neurology.

Under her leadership, the Pediatric Neurosurgery Program at Upstate has escalated to be regionally, nationally and internationally recognized.

Dr. Tovar-Spinoza's research and clinical interests, relate to the surgery of pediatric brain tumors and epilepsy, hydrocephalus, endoscopic treatment of hydrocephalus and brain tumors, minimally invasive surgery, spina bifida, spasticity, congenital and developmental malformations of the nervous system, Chiari malformation, craniofacial surgery, and pediatric brain trauma. All these multidisciplinary programs have been established and further developed during her time at Upstate. She also serves as the Associate Dean for Diversity and Inclusion for the College of Medicine at Upstate.

Dr. Tovar-Spinoza's pioneering clinical interests in the use of laser ablation in the surgical treatment of brain tumors and epilepsy in children has catapulted her to international recognition and expertise in this topic. Dr. Tovar-Spinoza has authored several chapters and peer-reviewed publications and is a frequently invited speaker at regional, national and international conferences and international neurosurgical training courses for peers and residents at the Listserv International Neurosurgery Resident Training Course. She has also created training and observership programs for students and residents of the University of Guadalajara and the University of Monterrey in Mexico.

Dr. Tovar-Spinoza is a senior member of the American Society of Pediatric Neurosurgery (ASPN), the Congress of Neurological Surgeons, the American Association of Neurological Surgeons, Women in Neurosurgery, Women in Medicine, American Epilepsy Society (AES), Pediatric Craniocervical Society (PCS), American Society of Pediatric Neurosurgeons, AANS/Joint Section on Neurotrauma and Critical Care. She also serves as the Honored member of the FLANC (Federation of Latin American Neurosurgical Societies) and their scientific committee.

She has long-standing contributions with the International Society for Pediatric Neurosurgery (ISPN) where she served as the publication manager of The Guide, an online reference book for pediatric neurosurgeons around the globe. She is currently the Chair of the Liaison Committee of the ISPN as well as a member of the nominating, scientific and organizing committees of the ISPN.

She is currently working closely with the plans on Globalization of the Pediatric Neurosurgery along with other organizations as well as evaluation of gender disparities in pediatric neurosurgery and neurosurgery in general. She is the invited editor of many pediatric and neurosurgical publications.

Dr. Tovar-Spinoza speaks Spanish, English, and Hebrew.