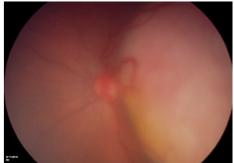
ALL ABOUT RETINOBLASTOMA

Amy C. Schefler, MD, Ocular Oncology Specialist

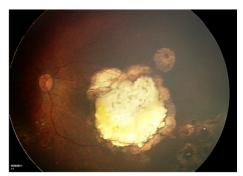
What is retinoblastoma?



We are excited to introduce our new retinoblastoma program at Children's Memorial Hermann Hospital in Houston, Texas. This is a cutting-edge center for this disease and we are the only hospital in the entire South-central U.S. offering the most modern approach to treating patients with this disease, intra-arterial chemotherapy. This treatment, first invented in Japan and then brought to the U.S. five years ago, enables children to have chemotherapy injected just into the arteries that feed the eye, rather than into the entire system, eliminating the complications that are normally seen with chemotherapy (fevers, low blood counts, loss of hair, infertility, etc.) and maximizing the dose to the eye. As a result, children are admitted to the hospital less often, and we are able to save more eyes from having to be removed.



A large advanced retinoblastoma before treatment with intra-arterial chemotherapy



The same eye after treatment with intra-arterial chemotherapy and laser.

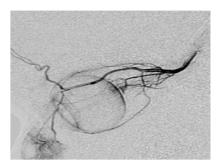
We also perform all types of standard treatment for these children including different forms of chemotherapy (intra-arterial, systemic or intravenous, periocular, intravitreal), radiation (both plaques and external beam), laser, cryotherapy, and enucleation surgery (removal of the eye). Every patient's treatment is tailored specifically to him/her.

This disease requires a large multi-specialty team with expertise in treating these children. We have over 50 genetic counselors, nurses, technicians, OR staff, and others who all meet regularly to discuss our patients. Children's Memorial Hermann is a welcoming, warm place for families where patients routinely rave about their experiences even in times of crisis.

We are also performing cutting-edge research at our center, looking for new ways to save eyes that have failed conventional therapies in the past. As a result, families come to us from all over the region when others have told them that there are no more treatment options.



Appearance of a child with leukocoria in the left eye from retinoblastoma during an examination under anesthesia in the operating room.



An angiogram image of an eye with retinoblastoma during intra-arterial chemotherapy administration.



AMY C. SCHEFLER, MD, OCULAR ONCOLOGIST

Dr. Amy Schefler is an ocular oncologist and retina specialist and the head of the Ocular Oncology Team. She has performed thousands of examinations and surgeries in adults and children with eye tumors. Clinical care of these patients and research in these diseases has always been her passion. Dr. Schefler graduated Cum Laude from Yale University with Highest Distinction in Behavioral Neuroscience. She received her medical degree from Cornell University with Honors and was awarded the Dean's Research Award and the

Edward Norton Prize, awarded to the student with the best performance entering the field of ophthalmology. She completed a one-year pre-residency fellowship with ocular oncologist David Abramson, M.D. at Memorial Sloan-Kettering Cancer Center and spent time learning from world-renowned ocular oncologists Carol and Jerry Shields, M.D. at Wills Eye Institute. Dr. Schefler then completed her ophthalmology residency, vitreoretinal surgery fellowship, and a third ocular oncology fellowship at Bascom Palmer Eye Institute, the top-rated eye hospital in the country. She served on the Bascom Palmer faculty as Chief Resident and Co-Director of Ocular Trauma, followed by two years on the faculty as an Assistant Professor of Ophthalmology performing vitreoretinal surgery and ocular oncology surgery. Dr. Schefler's research is focused on tumors of the eye in children and adults. She is the author of 50 peer-reviewed publications, 11 book chapters, and over 40 national and international meeting presentations. She serves as a reviewer for 20 major ophthalmic journals.



SIGMUND HSU, MD, NEURO-ONCOLOGIST

Dr. Hsu completed his undergraduate studies at Brown University and then did a neurology residency at Columbia College of Physicians and Surgeons in New York City. He then completed a neuro-oncology fellowship at MD Anderson Cancer Center where he was also on the faculty for several years before joining the team at Children's Memorial Hermann Hospital. His role on our team is the complex administration and personalized specialized dosing of the chemotherapy drugs that retinoblastoma patients require.



Mark Dannenbuam, MD, Interventional Neurosurgeon

Mark is a native Houstonian who went to medical school at the University of Texas. He then completed his neurosurgery residency at Baylor College of Medicine followed by additional fellowship training in interventional neurosurgery at Harvard and Emory Universities. He has a special expertise in the procedures required to perform interventions in the tiny arteries and veins in the brain. He also completed special training in the administration of chemotherapy to the ophthalmic artery for children with retinoblastoma.

He is currently on the faculty of neurosurgery at the University of Texas and performs surgery at Memorial Hermann and Children's Memorial Hermann Hospitals.



PATRICIA CHEVEZ-BARRIOS, MD, OPHTHALMIC PATHOLOGIST

Dr. Chévez-Barrios is a highly trained ophthalmic pathologist specializing in the interpretation of tumor specimens of eye cancer patients. She completed a residency in Anatomic and Clinical Pathology at Baylor College of Medicine as well as a subspecialized fellowship in Ophthalmic Pathology at Baylor. She is the Director of the Ocular Pathology Research Laboratory at the Methodist Hospital and is a Professor of Pathology and Laboratory Medicine at the Weill Medical College of Cornell University, Methodist Hospital location.



MARU BRETANA, OPHTHALMIC ULTRASONOGRAPHER

Maru Bretana received her M.D. and completed an ophthalmology residency in South America, then moved to Miami, Florida where she worked full-time for seven years as a senior ophthalmic ultrasonographer at the #1 ranked eye hospital in the U.S.— the Bascom Palmer Eye Institute. She has extensive experience in diagnostic ophthalmic ultrasound techniques such as: contact 10/20 MHz B-scan for the posterior segment, ultrasound bio-microscopy (20, 35, 50, and 80MHz), modified immersion, stan-

dardized diagnostic A-scan, IOL master, doppler, and biometry. Ms. Bretana has highly advanced skills in the ultrasound evaluation of many types of intraocular and orbital pathology, and has lectured extensively on the subject of ultrasound nationally and internationally. She is experienced with both pediatric and adult patients and is fluent in English and Spanish. Maru's role on our melanoma team is in helping to diagnose and followretinoblastoma during and after treatment.