

## **The PaulieStrong Foundation Research Summary – Filemon Dela Cruz MD**

My experiences in the laboratory and the clinic, caring for children with cancer, have served as the foundation for my goal to identify and develop effective therapies for pediatric sarcomas. We have entered a new era of medicine where we can utilize new techniques and technologies, that barely existed a decade ago, to identify the biological “weak spots” of various sarcomas and other cancers. By identifying the specific vulnerabilities for any given sarcoma, we can employ the existing clinical armamentarium of drugs to target, treat, and cure children of their cancer. To accomplish this goal, our laboratory has been at the forefront of developing and testing unique experimental models of childhood sarcomas including the “avatar” mouse model where we “grow” a biologic replicate of each patient’s tumor. By using these avatar models, we can not only test a large number of potentially effective drugs and identify the most effective agents for use to the patient, but we would also be helping to create invaluable models of rhabdomyosarcoma and other childhood sarcomas and solid tumors for future research efforts. Support from The PaulieStrong Foundation will enable our goal of bringing these innovative tools and approaches to finding cures for all children living with cancer.