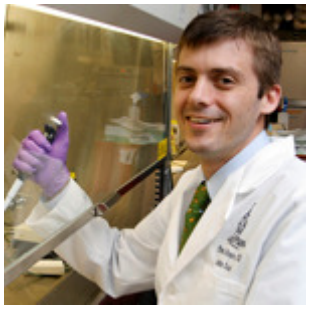
http://www.stbaldricks.org/where-the-money-goes/grant-recipients

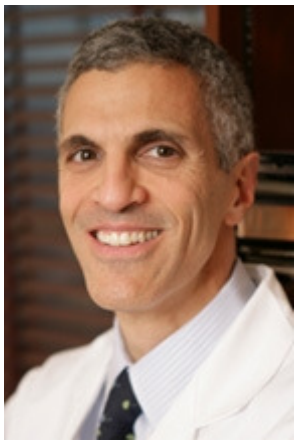
Mots clés : chercheurs immunotherapy et DIPG
Fondation Stbaldricks

Satiro De Oliveira, M.D. Funded: 7/1/2010 - 6/30/2013
University of California, Los Angeles
Los Angeles, CA
New therapeutic approaches are needed for pediatric leukemia and lymphoma, because patients with refractory or relapsed disease still have a survival rate of less than 50% with current therapies. This research involves a novel cancer immunotherapy protocol, transferring a gene into the patient's own blood stem cells, giving rise to immune cells able to directly and specifically target a surface molecule that is present in more than 95% of leukemias and lymphomas. We will evaluate the cancer cell destruction by the modified immune cells, setting a basis for future clinical trials.



Christopher Gamper, M.D., Ph.D. Funded: 7/1/2010 - 6/30/2013
Johns Hopkins University School of Medicine
Baltimore, MD
Chemotherapy and radiation destroy both cancer cells and normal cells, with toxic effects on growing children during treatment and afterwards. Immunotherapy has the potential to destroy only cancer cells, but it has not lived up to its full potential because cancer cells can promote inappropriate immune responses or simply turn immune cells off. This research will examine the function of T cells that lack the ability to methylate DNA; such cells may be better at killing tumors. This may help more patients with high-risk pediatric tumors, and decrease the risk of late-effects by reducing the need for more chemotherapy and radiation.

Marlene Bouvier, Ph.D.
Funded: 7/1/2010 - 6/30/2011
University of Illinois - Chicago
Chicago, IL
Most cancer therapies have significant toxicity, thus new treatment strategies are needed. Pediatric patients with cancer are excellent candidates for immunotherapy because their immune system is more robust compared to adults. Due to our lack of understanding of how to best activate these specialized anti-cancer cells, progress in pediatric immunotherapy has lagged behind. This research focuses on how we can best activate specific T cells to defend the immune system against tumors, specifically gliomas (brain tumors) and will advance the field of immunotherapy as a promising form of treatment for these children.



Mark Souweidane, M.D.
Funded: 7/1/2010 - 6/30/2011
Joan & Sanford I. Weill Medical College of Cornell University New York, NY
A type of brain tumor called diffuse intrinsic pontine glioma (DIPG) has no known cure. Radiation therapy offers some temporary relief, but nearly all children die from this cancer within 1 year. A promising form of drug delivery, convection-enhanced delivery (CED), offers many benefits including allowing high concentration of drugs to reach the brain tumor. This study will focus on drug distribution following this new form of drug delivery. By relating drug distribution and radiation dose to tumor response, a better treatment can be designed. Resulting clinical trials for a new therapy may eventually cure DIPG.

Issai Vanan, M.D., M.P.H. Funded: 7/1/2008 - 6/30/2010
Continued: 7/1/2010 - 6/30/2011
Steven and Alexandra Cohen Medical Center
New Hyde Park, NY
High grade gliomas, an aggressive type of brain tumor, have a survival rate of 1 to 3 years and are typically treated with radiation, surgery and chemotherapy. Dr. Vanan hypothesizes that the ionizing radiation (IR) used to treat the cancer activates a MRK protein that increases the invasiveness of the tumor cells, causing a high probability of relapse. By studying and understanding the causes of IR stimulated invasion and the recurrence of high grade brain tumors, he hopes to identify new drug targets to better treat and cure these aggressive tumors.