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Autopsy Tissue Needs

**Laboratory of Javad Nazarian, Ph.D.
Children's National Medical Center**

Research Interests

The major focus of our research is to understand the molecular components of pediatric brainstem glioma (BSG) and diffuse intrinsic pontine glioma (DIPG) and use this knowledge to improve the treatment of BSG patients. Our immediate plan is to map a wide range of molecular networks of the tumor, including proteins, micro RNAs, mRNAs, and any possible genomic abnormalities. The long-term goal of our study is to apply our molecular findings for tumor treatment, surgical resection, and development of targeted therapeutics.

One of the major hurdles in performing molecular studies of brainstem tumors is the lack of tissue availability. In an effort to collect and study brainstem samples, we have recently launched a clinical trial specific for studying specimens donated by brainstem gliomas and DIPG families (<http://clinicaltrials.gov/ct2/show/NCT01106794?term=DIPG&rank=3>). We hope that our collective efforts will lead to a better understanding of this childhood cancer and will help in development of targeted therapeutics.

Ongoing Research

Current ongoing projects in our laboratory include micro RNA and mRNA analysis of the tumor and adjacent normal areas. We are also in the process of generating protein profiles of the tumor and normal specimens. A complete RNA and proteome study will indeed broaden our understanding of the tumor and identify target molecules that can be further studied.

Nazarian, Javad , Mariarita Santi, Yetrib Hathout, and Tobey J. MacDonald. "Protein Profiling of Formalin Fixed Paraffin Embedded Tissue: Identification of Potential Biomarkers for Pediatric Brainstem Glioma," *Proteomics—Clinical Applications* 2, no. 6 (June 2008): 915-924.

Autopsy Tissue Needed

We are in need of frozen and paraffin-embedded samples for the following diagnoses: brainstem glioma (BSG) and diffuse intrinsic pontine glioma (DIPG).

Contact Information

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