Reprogramming the Brain Cancer Stem Cell

Glioblastoma contains subsets of tumor-propagating stem-like cells (i.e. glioma stem cells, GSCs) that are critical determinants of therapeutic resistance and tumor recurrence. GSCs are induced and maintained by dynamic cell reprogramming mechanisms (intra-tumoral induced multipotency) activated by both tumor cell autonomous and paracrine microenvironment-derived signals. Dr. Laterra's talk will describe the molecular basis of these events focusing on the roles of reprogramming transcription factors and downstream miRNA networks that regulate the epigenetic programming of the tumor propagating GSC phenotype.