In this talk we consider stochastic models of Glioblastoma Multiforme brain tumors. We first look at a model by K. Swanson et al., which describes the dynamics as random diffusion plus deterministic logistic growth. We introduce a stochastic component in the logistic growth in the form of a random growth rate defined by a Poisson process. We show that this stochastic logistic growth model leads to a more accurate evaluation of the tumor growth compared to its deterministic counterpart. We also discuss future plans to incorporate individual patient data into our model, in collaboration with a local hospital. (Received September 25, 2012)