

DR. GEORGE SGOUROS (2015 AWARD)

A Pre-Clinical Model of anti-HER2/neu-Antibody Reactive Breast Cancer Metastases

We proposed to develop and characterize a metastatic model of breast cancer in a transgenic mouse model so that the metastases developed by this model and the associated cell lines express HER2/neu. Such a model may be used to investigate targeting by Herceptin (trastuzumab) or therapy combinations with this antibody. In particular, my lab is interesting in investigating delivery of alpha-particle emitters with this antibody. We developed the model and have characterized several cell lines that are useful for research in and of themselves. We have had several requests for the cell lines and are going through the process of working out the needed materials transfer agreements and approvals from Hopkins and Genentech (developers of the transgenic mouse and of trastuzumab). Our work has been published here: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Human+HER2+overexpressing+mouse+breast+cancer+cell+lines+derived+from+MMTV.f.HuHER2+mice%3A+Characterization+and+use+in+a+model+of+metastatic+breast+cancer>.