



CANCER PREVENTION & RESEARCH  
INSTITUTE OF TEXAS

Award ID:  
RP160763

Project Title:  
Targeting multiple myeloma stem cell niche

Award Mechanism:  
High Impact/High Risk

Principal Investigator:  
McCarty, Nami

Entity:  
The University of Texas Health Science Center at Houston

Lay Summary:

Multiple myeloma (MM) is the second most common hematologic malignancy in the United States, with many patients displaying resistance to radiation and chemotherapies. Tumor cell heterogeneity within MM certainly contributes to drug resistance and patient relapse, yet we understand very little about genes and pathways that promote these events. Our previous studies showed that MM cell heterogeneity correlates with the presence of quiescent stem-like tumor cells. These MM stem cells preferentially reside in the bone osteoblastic niche and are highly tumorigenic and resistant to clinically relevant drugs. In this grant we will delineate functions for specific genes in MM stem cell growth and drug-resistance, with the goal of developing new therapies to improve survival of patients with MM.