

## Bankhead-Coley Cancer Research Program

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*2009 Program  
Bridge (1-year project)*

**Project Title:** Development of an Assay to Predict Radiosensitivity in Prostate Cancer

**Project Summary:** Prostate cancer is the most common cancer diagnosed in men and the second leading cause of cancer death in men. In this grant, we are adapting a technology that predicts the likelihood that a tumor will respond to radiation therapy. This technology, which is still in development, has already been shown successful in preliminary unpublished studies in esophageal, rectal, and head and neck cancer patients. It is logical, to test it in prostate cancer since radiation therapy is one of the principal treatments for patients with this disease, Thus, the potential clinical impact of this technology is of great significance. Finally, we think this technology will be central in moving forward personalized medicine in cancer. The purpose of personalized medicine is to select clinical therapies based on the likelihood of benefit to a specific individual. Thus, the aim is to select the right therapy for the right patient. Personalized medicine, if successful, would improve overall healthcare by individualizing care and avoiding unnecessary and toxic therapies, resulting in public healthcare improvement and health cost savings.