

## Bankhead-Coley Cancer Research Program

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*2011 Program  
Bridge  
(1 year project)*

**Project Title:** Sensory Alterations and Swallow Functions in RT Treated Head/Neck Cancer Patients

**Project Summary:** Head and neck cancer rates are increasing and their associated morbidity is among the highest. Nearly all head/neck cancer patients treated with radiotherapy experience dysphagia (swallowing difficulty). Other frequent morbidities include oral pain, oral dryness, and taste and smell deviations. Unfortunately relationships between dysphagia and oral sensory deficits are unclear and it is not known if they have a causative or maintenance effect on impaired oropharyngeal function. Furthermore, oral pain, oral dryness, and taste and smell deficits are not routinely integrated into dysphagia management. The proposed prospective cohort study seeks to address this knowledge gap. This study evaluates patients with head/neck cancer undergoing radiotherapy. Subjects will undergo assessment of oral sensory functions and swallowing ability. Subjects will be monitored during radiation treatment, and evaluated at the end of treatment and three months post treatment. Primary outcomes will be oral sensory functions (oral pain, oral dryness, taste, smell, and a genetic marker for taste sensitivity PROP) and measures of swallowing ability. Secondary outcomes include occurrence of medical and swallowing related complications, and recovery of oral diet. Results will be invaluable in earlier identification of dysphagic deficits, prevention of dysphagic morbidity, and the integration of sensory information to effective dysphagia and nutritional management strategies.