

James & Esther King Biomedical Research Program

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*Thoracic and Head and Neck
M.D. Anderson Cancer Center Orlando*

*2008 Program
New Investigator (3-year project)*

Project Title: Protease Inhibition of Invasion in Head and Neck Cancer

Project Summary: Cancers of the head and neck arise from the mouth, throat, and voice box. These cancers pose grave consequences for patients who suffer the loss of speech and swallowing and often form while patients are succumbing to their disease. A better understanding of the ways in which these cancers grow and spread can result in new strategies and improved treatment for these patients. We have identified a key characteristic of cancers of the head and neck that portends their aggressive behavior. Our studies at the laboratory bench, in experimental animals, and in patients treated for cancers of the head and neck show that the loss of an important regulator of normal cells can result in cancer cells capable of destruction. Our grant will determine why that key regulator is lost, how those changes are orchestrated, and how the consequences are manifested in patients. The knowledge gained from our research will shed new light on the way cancers destroy and spread in patients as well as lead to more effective weapons in our arsenal in the fight against cancers of the head and neck.