

# Chemistry Seminar

**“Translational Research in Human Prostate Cancer”**

**Dr. Ming-Fong Lin**

U. of Nebraska  
Medical Center

*Wednesday, April 27*

*12:00 p.m.*

*WSB-122*

Abstract: Prostate cancer is the second leading cause of male cancer mortality in the United States of America. While several approaches provide clinicians with effective options for treating patients with localized cancer, the treatment for those with metastatic disease is limited with androgen ablation therapy as the main choice. However, this treatment only provides benefit temporarily, and the disease relapses to the castration-resistant stage, the lethal form of disease. Treating this stage of disease has very minimal meaningful benefit. It is thus imperative to explore new therapeutic regimens, including agents with less toxicity and higher efficacy.

Combining different classes of drugs has proven effective in treating various diseases, including cancers. Nevertheless, conventional drug combinations tend to be more toxic to normal cells and patients are more susceptible to adverse side effects. One of recent advances is that inhibitors to tyrosine kinases can enhance the therapeutic efficacy of some cytotoxic agents. As such, the same efficacy on tumor suppression can be achieved by combining a lower dose of cytotoxic agents with inhibitors to signal transduction pathways, compared to the combination of conventional drugs. We investigate the molecular signaling pathway involving in prostate cancer progression with a goal of identifying functional target(s) for developing effective combination therapy for this patient population.

Dr. Lin will meet with students at 1:00 p.m. in WSB-344