Dr. Holden Thorp
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Presentation >>
New Inhibitors of Cytochrome P450 Enzymes:
Improved Drugs for Fungal Infections and Prostate Cancer

Synopsis >>
Metalloenzymes make up one-third of all enzymes, and enzyme inhibitors make up one-third of all marketed drugs. Thus, almost 10% of all marketed drugs bind to metalloenzymes. But far less than 10% of the medicinal chemists in the pharmaceutical industry are bioinorganic chemists. This principle leads to ways to improve metalloenzyme inhibitors. In particular, the fluconazole family of drugs bind to lanosterol demethylase, and abiraterone binds to CYP17, which produces testosterone. Both drugs have side effects that result from the off-target inhibition of other cytochrome P450 enzymes. Modifications of fluconazole derivatives and abiraterone that ameliorate these side effects will be shown.

Friday, February 7, 2014
3:00 p.m. - 4:00 p.m.
Student Government Association (SGA) Chamber, MSC
Reception immediately following in the MSC rotunda (3rd floor)