



PHILADELPHIA ORGANIC CHEMISTS' CLUB

- DATE:** Thursday, January 29, 2004; 6:00 pm dinner, 8:00 pm seminar
- PLACE:** Room 102, New Chemistry Building, University of Pennsylvania, 34th and Spruce Streets, Philadelphia, PA
- SPEAKER:** **Prof. John T. Koh**, University of Delaware, Newark, DE, 19716
- BIOGRAPHY:** Professor John T. Koh graduated from West Chester University in 1989 and pursued his graduate studies in the laboratories of Professor Ronald Breslow at Columbia. He then continued his scientific training as an American Cancer Society Postdoctoral Fellow in the laboratories of Professor Peter Schultz at UC Berkeley (Go Bears!). He began his independent career at the University of Delaware in the Department of Chemistry and Biochemistry with a research program focused on the interface between chemistry and biology.
- TITLE:** **Complementing Genetic Mutations by Molecular Design: Chemical Rescue of Nuclear Receptor Mutations**
- ABSTRACT:** Mutations to nuclear/steroid hormone receptors are associated with many genetic diseases such as rickets, resistance to thyroid hormone (RTH), androgen insensitivity syndrome (AIS) and certain forms of diabetes, breast and prostate cancer. Typically, these disease associated mutations prevent normal ligand binding and receptor function. In several recent examples the Koh research group has demonstrated that structure based design can be used to create hormone analogs capable of binding and restoring function to these otherwise dysfunctional proteins. In these examples of pharmacogenetic ligand design, only very small patient populations are associated with any specific mutation. However, in some examples, the efficiency of structure-based design suggests that for at least a subset of mutations, it may be practical to consider developing such focused orphan drugs as a new approach to the treatment of genetic disease.
- DINNER:** The meeting will be preceded by cocktails (cash bar) at 5:30 pm followed by a dinner at 6:00 pm at Penne Restaurant & Bar, 3601 Walnut Street. Reservations should be made by email: gregory.ott@bms.com or phone: (609)-252-3189 to Gregory Ott **before 5:00 pm, Monday, January 26th. Please pay the \$40.00 for dinner when you attend.** Thank you.