



The Southern California Drug Metabolism Discussion Group

Presents

Human Cytochrome P450 2A6 as a Case History: Flavors, Smoke, Blue Roses, New Drugs & Basics of a P450

Dr. Fred Guengerich

Professor of Biochemistry, School of Medicine, Vanderbilt University

Dr. Guengerich will review several aspects of cytochrome P450 enzymes and help you understand:

- The significance of cytochrome P450 reaction in issues of drug metabolism and potential toxicity.
- The function of human cytochrome P450 enzymes and approaches to characterizing the functions of "orphan" enzymes which presently do not have established functions.
- The importance of cytochrome P450 enzymes from microorganisms in drug discovery.
- How cytochrome P450 enzymes can be utilized in drug discovery as well as development.

Dr. Guengerich is a Professor of Biochemistry in the School of Medicine Vanderbilt University. Prof. Guengerich has been Director of the Center in Molecular Toxicology, an interdepartmental program at Vanderbilt, since 1981. His own research laboratory deals with the chemical and biological mechanisms by which drugs and cancer-causing chemicals are processed and the relevance to drug development, toxicity, and disease. A major area of interest is the enzymology of cytochrome P450 enzymes, which are the major catalysts involved in the metabolism of drugs. Studies with the recombinant human P450 enzymes involve the molecular basis for substrate and reaction discrimination, utilizing steady-state and pre-steady-state kinetics, binding analyses, and both site-directed and random mutagenesis approaches. He is an author or co-author of 492 original research articles and 124 invited reviews. He is or has been associate editor of 4 journals and on the editorial boards of 25. In 2001 he received the Earl Sutherland Research Prize, the highest research award given at Vanderbilt. He has also received research awards from a number of national and international scientific societies, including both the J. J. Abel (1984) and the B. B. Brodie (1992) Awards from ASPET, the 2003 North American Scientific Achievement Award from ISSX, the 2004 Distinguished Service Award from the American College of Toxicology, and the 2005 Wm. C. Rose Award from ASBMB. In 2002 he received an honorary doctorate from the University of Paris.

Wednesday, April 20, 2005

Registration/Buffer: 5 pm

Presentation begins: 7 pm

Location: Neurocrine Biosciences (Carmel Valley)

Price: \$15 Advance Registration, \$25 At the Door (includes buffet dinner and soft drinks/beer/wine)

The SCDMDG was established in 2003 as a forum for Southern California scientists working in drug metabolism in both academic and industrial settings to meet and discuss issues and share information for the public good.

Space is Limited—Register Early to Guarantee Your Attendance!

To Register for SCDMDG-F. Guengerich, April 20, 2005 send payment with this form to:

✉ Mail: 5310 Eastgate Mall, San Diego, CA 92121

*\$15/person in Advance, \$25 at the Door. Please make **CHECKS** payable to SCDMDG. **Deadline** for registration is April 15, 2005*

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