

RELEVANT PUBLICATIONS BY CYP450-GP SCIENTISTS

- Lasker JM**, Wester MR, Aramsombatdee E, Raucy JL. Characterization of CYP2C19 and CYP2C9 from human liver: respective roles in microsomal tolbutamide, S-mephenytoin, and omeprazole hydroxylations. *Arch Biochem Biophys* 353:16-28, 1998.
- Hirani V, Raucy JL, **Lasker JM**: Conversion of the HIV protease inhibitor nelfinavir to a bioactive metabolite by human liver CYP2C19. *Drug Metab Dispos* 32:1462-1467, 2004.
- Hirani V, Yarovoy A, Kozeska A, Magnusson RP, **Lasker JM**: Expression of CYP4F2 in human liver and kidney: assessment using specific peptide antibodies. *Arch Biochem Biophys* 478: 59-68, 2008.
- Savas U, Machemer DE, Hsu MH, Gaynor P, **Lasker JM**, Tukey RH, Johnson EF: Opposing roles of peroxisome proliferator-activated receptor alpha and growth hormone in the regulation of CYP4A11 expression in a transgenic mouse model. *J Biol Chem* 284: 16541-16552, 2009.
- Hsu MH, Savas U, **Lasker JM**, Johnson EF: Genistein, resveratrol, and 5-aminoimidazole-4-carboxamide-1-beta-D-ribofuranoside induce cytochrome P450 4F2 expression through an AMP-activated protein kinase-dependent pathway. *J Pharmacol Exp Ther* 337:125-136, 2011.
- Hirani V, Kozeska A, Yarovoy A, Nam E, Dhar M, Savas U, Magnusson RP, **Lasker JM**: The human CYP4A and CYP4F gene subfamilies: metabolic properties and tissue-specific expression of five predominant members. *Arch Biochem Biophys*, in review, 2013.

PUBLICATIONS FEATURING CYP450-GP REAGENTS

- Goldstein JA, Faletto MB, Romkes-Sparks M, Sullivan T, Kitareewan S, Raucy JL, **Lasker JM**, Ghanayem BI. Evidence that CYP2C19 is the major (S)-mephenytoin 4'-hydroxylase in humans. *Biochemistry* 33:1743-52, 1994.
- Stearns RA, Charkravarty PK, Chen R, Chiu S-H: Biotransformation of losartan to its active carboxylic acid metabolite in human liver microsomes: role of cytochrome 2C and 3A subfamily members. *Drug Metab Dispos* 23:207-215, 1995.
- Machinist JM, Mayer MD, Shet MS, Ferrero JL, Rodrigues AD: Identification of the human liver cytochrome P450 enzymes involved in the metabolism of zileuton (ABT-077) and its N-dehydroxylated metabolite, Abbott-66193. *Drug Metab Dispos* 23:1163-1174, 1995.
- Rodrigues AD, Kukulka MJ, Roberts EL, Ouellet D, Rodgers TR: [*O*-methyl 14C]naproxen *O*-demethylase activity in human liver microsomes. Evidence for the involvement of cytochrome P4501A2 and P4502C9/10. *Drug Metab Dispos* 24:126-136, 1996.
- Karam W, Goldstein J, **Lasker JM**, Ghanayem B: Human CYP2C19 is a major omeprazole 5-hydroxylase, as demonstrated with recombinant cytochrome P450 enzymes. *Drug Metab Dispos* 24:1081-1087, 1996.
- Wang R, Liu L, Cheng H. Identification of human liver cytochrome P450 isoforms involved in the in vitro metabolism of cyclobenzaprine. *Drug Metab Dispos* 24:786-791, 1996.
- Feierman DE, **Lasker JM**. Metabolism of fentanyl, a synthetic opioid analgesic, by human liver microsomes. Role of CYP3A4. *Drug Metab Dispos* 24:932-939, 1996.
- Kumar G, Dubberke E, Rodrigues A, Roberts E, Dennisen J. Identification of cytochromes P450 involved in the human liver microsomal metabolism of the thromboxane A2 inhibitor seratrodast (ABT-001). *Drug Metab Dispos* 25:110-115, 1997.
- Wang RW, Lu AYH. Inhibitory anti-peptide antibody against human CYP3A4. *Drug Metab Dispos* 25:762-767, 1997.
- Wang RW, Newton DJ, Liu NY, Shou M, Rushmore T, Lu AYH. Inhibitory anti-CYP3A4 peptide antibody: mapping of inhibitory epitope and specificity toward other CYP3A isoforms. *Drug Metab Dispos* 27:167-172, 1999.
- Wester MR, **Lasker JM**, Johnson EF, Raucy JL: CYP2C19 participates in tolbutamide hydroxylation by human liver microsomes. *Drug Metab Dispos* 28:354-359, 2000.

- Baker JR, Edwards RJ, **Lasker JM**, Moore MR, Satarug S: Renal and hepatic accumulation of cadmium and lead in the expression of CYP4F2 and CYP2E1. *Toxicol Lett* 159:182-91, 2005.
- Dhar M, Sepkovich D, Hirani V, Magnusson RP, **Lasker JM**: Omega oxidation of 3-hydroxy fatty acids by the human CYP4F subfamily enzyme CYP4F11. *J Lipid Res* 49:612-624, 2008.
- Savas U, Machemer DE, Hsu MH, Gaynor P, **Lasker JM**, Tukey RH, Johnson EF: Opposing roles of peroxisome proliferator-activated receptor alpha and growth hormone in the regulation of CYP4A11 expression in a transgenic mouse model. *J Biol Chem* 284: 16541-16552, 2009.
- Hsu MH, Savas U, **Lasker JM**, Johnson EF: Genistein, resveratrol, and 5-aminoimidazole-4-carboxamide-1-beta-D-ribofuranoside induce cytochrome P450 4F2 expression through an AMP-activated protein kinase-dependent pathway. *J Pharmacol Exp Ther* 337:125-136, 2011.

NOTE: The proprietary nature of drug development studies obviates listing of the clients whom utilized CYP450-GP reagents.

INDUSTRY POSITION PAPERS

- Huang SM, Strong JM, Zhang L, Reynolds *et al* : New era in drug interaction evaluation: US Food and Drug Administration update on CYP enzymes, transporters, and the guidance process. *J Clin Pharmacol* 48:662-670, 2008.
- Chu V *et al* : *In vitro* and *in vivo* induction of cytochrome P450: a survey of the current practices and recommendations: a Pharmaceutical Research and Manufacturers of America (PhRMA) Perspective. *Drug Metab Dispos* 1339-1354, 2009.
- FDA: Draft Guidance for Industry: drug interaction studies - study design, data analysis, implications for dosing and labeling recommendations, 2012.