
BIOGRAPHICAL SKETCH

NAME Xie, Wen	POSITION TITLE Professor and Director, Joseph Koslow Endowed Chair in Pharmaceutical Sciences
eRA COMMONS USER NAME wenxie	

EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
Peking University Health Science Center, China	M.D.	1985-1991	Medicine
University of Alabama at Birmingham, USA	Ph.D.	1993-1997	Cell Biology
The Salk Institute, USA	Postdoctoral	1998-2002	Nuclear Receptors

A. Positions and Honors

Positions and Employment

- 08/1991 - 08/1993: Instructor, Division of Biochemistry, Institute of Sports Medicine, Peking University Health Science Center, Beijing, China.
- 1993 - 1997: Graduate Research Assistant, Department of Cell Biology and Medicine, University of Alabama at Birmingham, USA. Advisor: Dr. Jeffrey E. Kudlow.
- 04/1998 - 03/2002: Research Associate, Gene Expression Laboratory, Salk Institute, USA. Advisor: Dr. Ronal M. Evans.
- 2002 - 2006: Assistant Professor, Center for Pharmacogenetics and Department of Pharmaceutical Sciences, University of Pittsburgh School of Pharmacy.
- 2003 - present: Assistant Professor (2003-2007), Associate Professor (2008-2010), Professor (2011-present) (secondary appointment), Department of Pharmacology and Chemical Biology, University of Pittsburgh School of Medicine
- 2007 - 2010: Associate Professor and Associate Director, Center for Pharmacogenetics and Department of Pharmaceutical Sciences, University of Pittsburgh School of Pharmacy.
- 2011 - present: Professor and Director, Center for Pharmacogenetics and Department of Pharmaceutical Sciences, University of Pittsburgh School of Pharmacy.
- 2012 - present: Joseph Koslow Endowed Chair in Pharmaceutical Sciences

Other Experience and Professional Memberships

Ad hoc journal reviewer (representatives): *PNAS; Hepatology; Mol Pharmacol; J Pharmacol Exp Ther; Drug Metab and Dispo; Curr Drug Metab; Endocrinology; Mol Endocrinol; Mol Cell Endocrinol; Am J Physiol; Am J Pathol; Carcinogenesis; Cancer Res; Toxicol Sci; Mol Pharm; Cell Metab; Mol Cell Biol; Nucleic Acid Res; Xenobiotica; J Lipid Res; J Clin Invest; Nat Med; J Am Chem Soc; Mol Biol Cell; J Steroid Biochem; Gastroenterology; Chem Res Toxicol; Environ Health Perspect; Arterioscler Thromb Vasc Biol; Liver Int; Gut; Br J Pharmacol; PloS ONE; Cell Physiol Biochem; AAPS J; Biochim Biophys Acta; Genes & Dev; Clin Pharmacol Ther; Biochem Pharmacol; Cancer Lett*

Book and journal editorial service (representatives): "Nuclear Receptors in Drug Metabolism", a Wiley book published in 2008 (Xie, W, Editor); *Current Drug Metabolism* (Guest Editor, 2004; Editorial Board, 2005-); *Drug Metabolism Reviews* (Editorial Board, 2008-; Guest Editor, 2012); *Advanced Drug Delivery Reviews* (Guest Editor, 2010); *Molecular Endocrinology* (Editorial Board, 2010-2012; 2014-2016); *Drug Metabolism and Disposition* (Editorial Board, 2012-)

Ad hoc grant reviewer (US federal only): NIH Cancer Etiology Study Section (2005-2008); DOD Prostate Cancer Research Program (PCRP), Clinical and Experimental Therapeutics Committee 2 (CET-2) (2004;

2005), CET-4 (2008), CET-B (2009; 2010; 2011), CET-2 (2009), and Pre-CET-1 (2012); DOD Breast Cancer Research Program (BCRP) Concept Award (2006; 2007), CET-2 (2006; 2007), and Idea and Postdoctoral Award Panel 7 (2009); NIH/NIEHS Superfund (P42) Review (2007; 2008; 2009; 2010); NIH ZRG11/Developmental Pharmacology SEP (2008; 2009; 2010; 2011; 2012); NCI Program Project (P01) SEP II (2013); NIH/Ruth L. Kirschstein Predoctoral and Postdoctoral fellowship (Nov, 2013); NIH/Systemic Injury by Environmental Exposure (SIEE) SEP (Feb, Jun and Nov, 2013; Feb and Jun 2014); NIH/NHLBI, RFA on "Basic Research in the Pathogenesis of HIV-Related Heart, Lung, and Blood (HLB) Diseases in Adults and Children" (April 2014)

Recent invited conference presentations (since 2010 and representatives): *Keystone Symposium on Nuclear Receptors: Development, Physiology and Disease*, March 2010; *2010 International Symposium on Microsomes and Drug Oxidation*, May 2010; *13th Annual Meeting of the Canadian Society of Pharmaceutical Sciences*, June 2010; *Asia-Pacific ISSX Meeting*, April 2011; *17th North American ISSX Meeting*, October 2011; *Society of Toxicology Annual Meeting*, March 2012; *Experimental Biology Meeting*, April 2012; *Penn State Summer Symposium on Xenobiotic Receptors*, July 2012; *10th International ISSX Meeting*, October 2013; *AAPS Annual Meeting*, November 2013; *Society of Toxicology Annual Meeting*, March 2014; *International Symposium on Microsomes and Drug Oxidation*, May 2014

Honors

- 1996: The Samuel B. Barker Award for Excellence in Research by a Graduate Student, University of Alabama at Birmingham
- 1998: The Joseph Reeves Award for Excellence in Research by a Post-Doctoral Scholar, University of Alabama at Birmingham
- 06/1998 - 06/1999: Postdoctoral Fellowship, Howard Hughes Medical Institute
- 07/1999 - 12/1999: Postdoctoral Fellowship, California Breast Cancer Research Program
- 12/1999 - 03/2002: Postdoctoral Fellowship, Susan G. Komen Breast Cancer Foundation
- 2003-: Guest Professor, Capital University of Medical Sciences, Beijing, China
- 2008: University of Pittsburgh Chancellor's Distinguished Research Award
- 2008-: Guest Professor, Beijing Normal University, Beijing, China.
- 2008-: Guest Professor, Sun Yet-Sen University, Guangzhou, China.
- 2008: *James R. Gillette* International Society for the Study of Xenobiotics (ISSX) North American New Investigator Award.
- 2009: American Society for Pharmacology and Experimental Therapeutics (ASPET) Division for Drug Metabolism Early Career Achievement Award.
- 2011: Visiting Professorship, University of Cagliari, Cagliari, Italy
- 2011-: Guest Professor, Peking University Health Science Center, Beijing, China.
- 2012-: Guest Professor, Shantou University School of Medicine, Shantou, Guangdong, China.
- 2012-: Guest Professor, Third Military Medical University, Chongqing, China.
- 2012-: Joseph Koslow Endowed Chair in Pharmaceutical Sciences
- 2012: Distinguished alumnus, Peking University Health Science Center/Beijing Medical University
- 2013-: Guest Professor, Zhejiang University, Hangzhou, Zhejiang, China

B. Selected Peer-reviewed Publications (Selected from a total of 122 peer-reviewed publications since 1995)

1. Chen H, Lin RJ, **Xie W**, Wilpitz D, and Evans RM. Regulation of hormone induced histone hyperacetylation and gene activation via acetylation of an acetylase. *Cell* 98: 675-686 (1999).
 2. **Xie W**, Barwick JL, Simon CM, Downes M, Blumberg B, Neuschwander-Tetri BA, Brunt EM, Guzelian PS, and Evans RM. Humanized xenobiotic response in mice expressing nuclear receptor SXR. *Nature* 406, 435-439 (2000). (PMID: 10935643)
 3. **Xie W**, Barwick JL, Simon CM, Pierce A, Safe S, Blumberg B, Guzelian PS, and Evans RM. Reciprocal activation of xenobiotic response genes by nuclear receptors SXR/PXR and CAR. *Genes & Dev.* 14, 3014-3023 (2000). (PMID: 11114890)
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4. **Xie W**, Radomska-Pandya A, Shi Y, Simon CM, Nelson MC, Ong ES, Waxman DJ, and Evans RM. An essential role for SXR/PXR in detoxification of cholestatic bile acids. *Proc. Natl. Acad. Sci. USA*. 98, 3375-3380 (2001). (PMID: 11248086)
 5. Makishima M, Lu TT, **Xie W**, Whitefield GK, Domoto H, Evans RM, Haussler MR, and Mangelsdorf DJ. Vitamin D receptor as a bile acid sensor. *Science* 296, 1313-1316 (2002). (PMID: 12016314)
 6. Sonoda J, **Xie W**, Rosenfeld JM, Barwick JL, Guzelian PS, and Evans RM. Regulation of a sulfonation cascade by nuclear receptor PXR. *Proc. Natl. Acad. Sci. USA*. 99, 13801-13806 (2002). (PMID: 12370413)
 7. **Xie W**, Yeuh M-F, Radomska-Pandya A, Saini SPS, Nigishi Y, Bottroff BS, Cabrera GY, Tukey RH, and Evans RM. Control of steroid, heme and carcinogen metabolism by nuclear receptors PXR and CAR. *Proc. Natl. Acad. Sci. USA*. 100, 4150-4155 (2003). (PMID: 12644700)
 8. Saini SPS, Sonoda J, Xu L, Toma D, Hirdesh H, Mu Y, Ren S, Moore DD, Evans RM, and **Xie W**. A novel CAR-mediated and CYP3A-independent pathway of bile acid detoxification. *Mol. Pharm.* 65, 292-300 (2004). (PMID: 14742670)
 9. Uppal H, Toma D, Saini SPS, Ren S, Jones TJ, and **Xie W**. The combined loss of orphan receptors PXR and CAR heightens the sensitivity to toxic bile acids in mice. *Hepatology* 41, 168-176 (2005). (PMID: 15619241)
 10. Saini SPS, Mu Y, Gong H, Toma D, Uppal H, Ren S, Li S, Poloyac SM, **Xie W**. Dual role of orphan nuclear receptor pregnane X receptor in bilirubin detoxification in mice. *Hepatology*. 41:497-505 (2005). (PMID: 15726644)
 11. Mu Y, Stephenson CRJ, Kendall C, Saini SPS, Toma D, Ren S, Cai H, Strom S, Day BW, Wipf P, and **Xie W**. A PXR agonist with unique species-dependent stereoselectivity and its implications in drug development. *Mol. Pharmacol.* 68: 403-413 (2005). (PMID: 15872116)
 12. He F, Li J, Mu Y, Kuruba R, Ma Z, Wilson A, Alber, S, Stevens T, Watkins S, Pitt B, **Xie W**, and Li S. Down-regulation of endothelin-1 by farnesoid X receptor in vascular endothelial cells. *Circulation Research* 98: 192-199 (2006). (PMID: 16357303)
 13. Gong H, Singh SV, Singh SP, Mu Y, Lee JH, Saini SPS, Toma D, Ren S, Kagan VE, Day BW, Zimniak P, and **Xie W**. Orphan nuclear receptor PXR sensitizes oxidative stress responses in transgenic mice and cancerous cells. *Mol. Endocrinol.* 20: 279-290 (2006). (PMID: 16195250)
 14. Mu Y, Zhang J, Zhang S, Toma D, Ren S, Huang L, Yaramus M, Baum A, Venkataramanan R, and **Xie W**. Traditional Chinese Medicines Wu Wei Zi (*Schisandra chinensis* Baill) and Gan Cao (*Glycyrrhiza uralensis* Fisch) Activate PXR and Increase Warfarin Clearance in Rats. *J. Pharmacol. Exp. Ther.* 316: 1369-1377 (2006). (PMID: 16267138)
 15. Zhou J, Zhai Y, Mu Y, Gong H, Uppal H, Toma D, Ren S, Evans RM, and **Xie W**. A novel PXR-mediated and SREBP-independent lipogenic pathway. *J Biol Chem*. 281: 15013-15020 (2006). (PMID: 16556603)
 16. Gu X, Ke S, Tao S, Thomas PE, Rabson AB, Gallo MA, **Xie W**, and Tian Y. Role of NF- κ B in Regulation of PXR-Mediated gene expression: A mechanism for the suppression of cytochrome P450 3A4 by proinflammatory agents. *J Biol Chem*. 281: 17882-17889 (2006). (PMID: 16608838)
 17. **Xie W**, and Tian Y. Xenobiotic receptor meets NF- κ B, a collision in the small bowel. *Cell Metabolism* 4: 177-178 (2006). (PMID: 16950133)
 18. Zhai Y, Pai HV, Zhou J, Amico JA, Vollmer RR, and **Xie W**. Activation of pregnane X receptor disrupts glucocorticoid and mineralocorticoid homeostasis. *Mol. Endocrinol.* 21: 138-147 (2006). (PMID: 16973756)
 19. Uppal H, Saini SPS, Moschetta A, Mu Y, Zhou J, Gong H, Zhai Y, Ren S, Michalopoulos GK, Mangelsdorf DJ, and **Xie W**. Activation of LXRs prevents bile acid toxicity and cholestasis in female mice. *Hepatology* 45: 422-432 (2007). (PMID: 17256725)
 20. Sáenz-Robles MT, Toma D, Cantalupo P, Zhou J, Gong H, Edwards C, Pipas JM, and **Xie W**. Repression of intestinal drug metabolizing enzymes by the SV40 large T antigen. *Oncogene* 26: 5124-5131, (2007) (PMID: 17334401)
 21. Gong H, Guo P, Zhai Y, Zhou J, Uppal H, Jarzynka MJ, Song WC, Cheng SY, and **Xie W**. Estrogen deprivation and inhibition of breast cancer growth *in vivo* through activation of the orphan nuclear receptor LXR. *Molecular Endocrinology* 21: 1781-1790 (2007) (PMID: 17536009)
 22. Alaynick WA, Kondo RP, **Xie W**, He W, Dufour CR, Downes M, Jonker JW, Giles W, Naviaux RK, Giguère V, Evans RM. ERR γ directs and maintains the transition to oxidative metabolism in the postnatal heart. *Cell Metabolism* 6: 13-24 (2007). (PMID: 17618853)
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23. Kang HS, Angers M, Beak JY, Wu X, Gimble J, Wada T, **Xie W**, Collins J, Grissom S, and Jetten AM. Gene expression profiling reveals a regulatory role for ROR α and ROR γ in Phase I and Phase II Metabolism. *Physiol Genomics* 31: 281-294 (2007) (PMID: 17666523)
 24. Zhou J, Febbraio M, Wada T, Zhai Y, Kuruba R, Khadem S, He J, Lee JH, Ren S, Li S, Silverstein RL, and **Xie W**. Hepatic fatty acid transporter Cd36 is a common target of LXR, PXR and PPAR γ in promoting lipogenesis. *Gastroenterology* 134: 556-567 (2008) (PMID: 18242221)
 25. Zhang Q, He F, Kuruba R, Gao X, Wilson A, Li J, Billiar TR, Pitt BR, **Xie W**, and Li S. FXR-mediated regulation of angiotensin type 2 receptor expression in vascular smooth muscle cells. *Cardiovascular Research* 77: 560-569 (2008) (PMID: 18006431)
 26. Wang H, Li H, Moore LB, Johnson MDL, Maglich JM, Goodwin B, Iitoo ORR, Wisely B, Creech K, Parks DJ, Collins JL, Willson TM, Kalpana GV, Venkatesh M, **Xie W**, Cho SY, Roboz J, Redinbo M, Moore JT, and Mani S. The phytoestrogen coumestrol is a naturally-occurring antagonist of the human pregnane X receptor (PXR). *Molecular Endocrinology* 22: 838-857 (2008) (PMID: 18096694)
 27. Wada T, Kang SH, Angers M, Gong H, Bhatia S, Khadem S, Ren S, Ellis E, Strom SC, Jetten AM, and **Xie W**. Identification of oxysterol 7 α -hydroxylase (*Cyp7b1*) as a novel ROR α target gene and a functional crosstalk between ROR α and LXR. *Mol Pharmacol* 73: 891-899 (2008) (PMID: 18055760)
 28. Uppal H, Zhai Y, Gangopadhyay A, Khadem S, Ren S, Moser JA, and **Xie W**. Activation of LXR sensitizes mice to gallbladder cholesterol crystallization. *Hepatology* 47: 1331-1342 (2008) (PMID: 18318438)
 29. Li J, Wilson A, Kuruba R, Zhang Q, Gao X, He F, Zhang L-M, Pitt BR, **Xie W**, and Li S. FXR-mediated regulation of eNOS expression in vascular endothelial cells. *Cardiovascular Research* 77: 169-77 (2008) (PMID: 18006476)
 30. Zhou J, Liu M, Zhai Y, and **Xie W**. The anti-apoptotic role of pregnane X receptor in human colon cancer cells. *Molecular Endocrinology* 22: 868-880 (2008) (PMID: 18096695)
 31. He F, Zhang Q, Kuruba R, Gao X, Li J, Li Y, Gong W, Jiang Y, Xie W, Li S. Upregulation of decorin by FXR in vascular smooth muscle cells. *Biochem Biophys Res Commun.* 372: 746-751 (2008) (PMID: 18514055)
 32. Lee JH, Gong H, Khadem S, Lu Y, Gao X, Li S, Zhang J, **Xie W**. Androgen deprivation by activating the liver X receptor. *Endocrinology* 149: 3778-3788 (2008) (PMID: 18450964)
 33. Zhang B, **Xie W**, and Krasowski MD. PXR, a xenobiotic receptor of diverse function and implicated in pharmacogenetics. *Pharmacogenomics* 9: 1695-1709 (2008) (PMID: 19018724)
 34. Gong H, Jarzynka MJ, Cole TJ, Lee JH, Wada T, Zhang B, Gao J, Song WC, DeFranco DB, Cheng SY, **Xie W**. Glucocorticoids antagonize estrogens by glucocorticoid receptor-mediated activation of estrogen sulfotransferase. *Cancer Research.* 68: 7386-7393 (2008) (PMID: 18794126)
 35. Xie Y, Ke S, Ouyang N, He J, **Xie W**, Bedford MT, Tian Y. Epigenetic regulation of the transcriptional activity of pregnane X receptor by protein arginine methyltransferase 1. *J Biol Chem.* 284: 9199-9205 (2009) (PMID: 19144646)
 36. Wada T, Gao J, **Xie W**. PXR and CAR in energy metabolism. *Trends Endocrinol Metab* 20: 273-279 (2009) PMID: 19595610
 37. Li J, Wilson A, Gao X, Kuruba R, Liu Y, Poloyac S, Pitt B, **Xie W**, Li S. Coordinated regulation of dimethylarginine dimethylaminohydrolase-1 and cationic amino acid transporter-1 by farnesoid X receptor in mouse liver and kidney and its implication in the control of blood levels of asymmetric dimethylarginine. *J Pharmacol Exp Ther.* 331: 234-243 (2009) PMID: 19605523
 38. Liu MJ, Takahashi Y, Wada T, He J, Gao J, Tian Y, Li S, **Xie W**. The aldo-keto reductase *Akr1b7* gene is a common transcriptional target of xenobiotic receptors PXR and CAR. *Molecular Pharmacology* 76: 604-611 (2009) PMID: 19542321
 39. Gong H, He J, Lee JH, Mallick E, Gao X, Li S, Homanics GE, **Xie W**. Activation of the liver X receptor prevents lipopolysaccharide-induced lung injury. *J Biol Chem.* 284: 30113-30121 (2009) PMID: 19717840
 40. Gao J, He J, Zhai Y, Wada T, **Xie W**. The constitutive androstane receptor is an anti-obesity nuclear receptor that improves insulin sensitivity. *J Biol Chem.* 284: 25984-25992 (2009) PMID: 19617349
 41. He J, Cheng Q, **Xie W**. Nuclear receptor-controlled steroid hormone synthesis and metabolism. *Mol Endocrinol.* 24: 11-21 (2010) PMID: 19762543
 42. Jin L, Martynowski D, Zheng S, Wada T, **Xie W**, Li Y. Structural basis for hydroxycholesterols as natural ligands of orphan nuclear receptor ROR γ . *Mol Endocrinol.* 24: 923-929 (2010) PMID: 20203100
 43. Ou Z, Huang M, Zhao L, **Xie W**. Use of transgenic mice in UDP-glucuronosyltransferase (UGT) studies. *Drug Metab Rev.* 42: 119-127 (2010)
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44. Zhai Y, Wada T, Zhang B, Khadem S, Ren S, Kuruba R, Li S, **Xie W**. A functional crosstalk between LXR α and CAR links lipogenesis and xenobiotic responses. *Mol Pharmacol* 78: 666-674 (2010) PMID: 20592274
 45. Lee JH, Wada T, Febbraio M, He J, Matsubara T, Lee MJ, Gonzalez FJ, **Xie W**. A novel role for the dioxin receptor in fatty acid metabolism and hepatic steatosis. *Gastroenterology* 139: 653-663 (2010) PMID: 20303349
 46. Zhang B, Cheng Q, Ou Z, Lee JH, Xu M, Kochhar U, Ren S, Huang M, Pflug BR, **Xie W**. Pregnane X receptor as a therapeutic target to inhibit androgen activity. *Endocrinology* 151: 5721-5729 (2010) PMID: 20962047
 47. Gao J, **Xie W**. PXR and CAR at the crossroad of drug metabolism and energy metabolism. *Drug Metab Dispos* 38: 2091-2095 (2010) PMID: 20736325
 48. Kang HS, Okamoto K, Kim YS, Takeda Y, Bortner CD, Dang H, Wada T, **Xie W**, Yang XP, Liao G, Jetten AM. Nuclear orphan receptor TAK1/TR4-deficient mice are protected against obesity-linked inflammation, hepatic steatosis, and insulin resistance. *Diabetes* 60: 177-188 (2010) PMID: 20864514
 49. Ou Z, Wada T, Gramignoli R, Li S, Strom SC, Huang M, **Xie W**. MicroRNA hsa-miR-613 targets the human LXR α gene and mediates a feed-back loop of LXR α autoregulation. *Mol Endocrinol* 25: 584-596 (2011) PMID: 21310851.
 50. Li J, Zhang Y, Kuruba R, Gao X, **Xie W**, Li S. Roles of miR-29a in the antifibrotic effect of FXR in hepatic stellate cells. *Mol Pharmacol* 80: 191-200 (2011) PMID: 21511916
 51. Kang HS, Okamoto K, Takeda Y, Beak JY, Gerrish KE, Bortner CD, Degraff LM, Wada T, **Xie W**, Jetten AM. Transcriptional profiling reveals a role for ROR α in regulating gene expression in obesity-associated inflammation and hepatic steatosis. *Physiol Genomics* 43: 818-828 (2011) PMID: 21540300
 52. He J, Nishida S, Xu M, Makishima M, **Xie W**. PXR prevents cholesterol gallstone disease by regulating biosynthesis and transport of bile salts. *Gastroenterology* 140: 2095-2106 (2011) PMID: 21354151
 53. Saini SP, Zhang B, Niu Y, Jiang M, Gao J, Zhai Y, Lee JH, Uppal H, Tian H, Tortorici MA, Poloyac SM, Qin W, Venkataramanan R, **Xie W**. Activation of LXR increases acetaminophen clearance and prevents its toxicity in mice. *Hepatology* 54: 2208-2217 (2011) PMID: 21898498
 54. Wada T, Ihunnah CA, Gao J, Chai X, Zeng S, Philips BJ, Rubin JP, Marra KG, **Xie W**. Estrogen sulfotransferase inhibits adipocyte differentiation. *Mol Endocrinol* 25: 1612-1623 (2011) PMID: 21816900
 55. Bai Q, Zhang X, Xu L, Kakiyama G, Heuman D, Sanyal A, Pandak WM, Yin L, **Xie W**, Ren S. Oxysterol sulfation by cytosolic sulfotransferase suppresses liver X receptor/sterol regulatory element binding protein-1c signaling pathway and reduces serum and hepatic lipids in mouse models of nonalcoholic fatty liver disease. *Metabolism* 61:836-45 (2012) PMID: 22225954
 56. Gao J, He J, Shi X, Stefanovic-Racic M, Xu M, O'Doherty RM, Garcia-Ocana A, **Xie W**. Sex-specific effect of estrogen sulfotransferase (EST) on mouse models of type 2 diabetes. *Diabetes* 61: 1543-1551 (2012) PMID: 22438574
 57. Li G, Thomas AM, Williams JA, Kong B, Liu J, Inaba Y, **Xie W**, Guo GL. Farnesoid X receptor induces murine scavenger receptor class B type I via intron binding. *PLoS ONE* 7: e35895 (2012) PMID: 22540009
 58. Williams JA, Thomas AM, Li G, Kong B, Zhan L, Inaba Y, **Xie W**, Ding WX, Guo GL. Tissue Specific Induction of p62/Sqstm1 by Farnesoid X Receptor. *PLoS ONE* 7: e43961 (2012) PMID: 22952826
 59. Lo WS, Lim YP, Chen CC, Hsu CC, Souček P, Yun CH, **Xie W**, Ueng YF. A dual function of the furanocoumarin cholestin in inhibiting Cyp2a and inducing Cyp2b in mice: the protein stabilization and receptor-mediated activation. *Arch Toxicol*. 86: 1927-38 (2012) PMID: 22790670
 60. Gao J, **Xie W**. Targeting xenobiotic receptors PXR and CAR for metabolic diseases. *Trends Pharmacol Sci*. 33: 552-558 (2012) PMID: 22889594
 61. Swanson HI, Wada T, **Xie W**, Renga B, Zampella A, Distrutti E, Fiorucci S, Guo GL, Narayanan R, Yepuru M, Dalton JT, Chiang JY. Symposium Report: Role of nuclear receptors in lipid dysfunction and obesity-related diseases. *Drug Metab Dispos* 41: 1-11 (2013) PMID: 23043185
 62. Ou Z, Shi X, Gilroy RK, Kirisci L, Romkes M, Lynch C, Wang H, Xu M, Jiang M, Ren S, Gramignoli R, Strom SC, Huang M, **Xie W**. Regulation of the human hydroxysteroid sulfotransferase SUL2A1 by ROR α and ROR γ and its potential relevance in human liver diseases. *Mol Endocrinol* 27: 106-115 (2013) PMID: 23211525
 63. Jiang M, **Xie W**. Role of the constitutive androstane receptor in obesity and type 2 diabetes, a case study of the endobiotic function of a xenobiotic receptor. *Drug Metab Rev*. 45: 156-163 (2013) PMID: 23330547
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64. Chai X, Zeng S, **Xie W**. Nuclear receptors PXR and CAR: implications for drug metabolism regulation, pharmacogenomics and beyond. *Expert Opin Drug Metab Toxicol*. 9: 253-266 (2013) PMID: 23327618
65. He J, Gao J, Xu M, Ren S, Stefanovic-Racic M, O'Doherty RM, **Xie W**. PXR ablation alleviates diet-induced and genetic obesity and insulin resistance in mice. *Diabetes* 62: 1876-1887 (2013) PMID: 23349477.
66. He J, Hu B, Shi X, Weidert ER, Lu P, Xu M, Huang M, Kelley EE, **Xie W**. Activation of the aryl hydrocarbon receptor sensitizes mice to non-alcoholic steatohepatitis by deactivating the mitochondrial sirtuin deacetylase Sirt3. *Mol Cell Biol* 33: 2047-2055 (2013) PMID: 23508103
67. Kittayarakul S, Zhao W, Xu M, Ren S, Lu J, Wang J, Downes M, Evans RM, Venkataraman R, Chatsudthipong V, **Xie W**. Identification of three novel natural product compounds that activate PXR and CAR and inhibit inflammation. *Pharm Res* 30: 2199-2208 (2013) PMID: 23896737
68. Shi X, Cheng Q, Xu L, Yan J, Jiang M, He J, Xu M, Stefanovic-Racic M, Sipula I, O'Doherty RM, Ren S, **Xie W**. Cholesterol Sulfate and Cholesterol Sulfotransferase Inhibit Gluconeogenesis by Targeting HNF4 α . *Mol Cell Biol*. 34: 485-497 (2014) PMID: 24277929
69. Jiang M, He J, Kucera H, Gaikwad N, Zhang B, Xu MW, O'Doherty RM, Selcer KW, **Xie W**. Hepatic over-expression of steroid sulfatase ameliorates mouse models of obesity and type 2 diabetes through sex-specific mechanisms. *J Biol Chem*. 2014 Feb 4. [Epub ahead of print] PMID: 24497646
70. Ihunnah CA, Wada T, Philips BJ, Ravuri SK, Gibbs RB, Kirisci L, Rubin JP, Marra KG, **Xie W**. Estrogen sulfotransferase (EST/SULT1E1) promotes human adipogenesis. *Mol Cell Biol* 2014 Feb 24. [Epub ahead of print] PMID: 24567372

C. Research Support

Ongoing Research Support

Title: The Perinatal Pharmacology of the Nuclear Receptor FXR

National Institute of Health, NICHD, R01 HD073070 04/01/13 – 03/31/2018

The goal of this project is to study the perinatal maternal and fetal effect of FXR activation.

Role: Principal Investigator (20% effort)

Title: A Novel Role of the Aryl Hydrocarbon Receptor in Hepatic Steatosis

National Institute of Health, NIDDK, R01 DK083952 05/01/10 – 03/31/2015

The goal of this project is to study the role of the aryl hydrocarbon receptor (AhR) in fatty liver.

Role: PI (30% effort)

Completed Research Support (representatives)

National Institute of Health, NIEHS, R01 ES012479 08/01/03-04/30/08

Regulation of the phase II UDP-glucuronosyltransferases by PXR

The goal of this project is to study the transcriptional regulation of phase II drug-metabolizing and clearing enzymes by the xenobiotic nuclear receptor PXR. Role: PI

National Institute of Health, NCI, R01 CA107011 4/1/04 - 2/28/09

Orphan Nuclear Receptor PXR Controlled Bile Acid Detoxification in Colon Cancer

The long-term goals of this study are to determine the molecular mechanisms by which PXR regulates bile acid detoxification and the implication of this regulation in colon cancer prevention. Role: PI

National Institute of Health, NIEHS, R01 ES014626 12/01/06 – 11/30/2011

Regulation of Sulfotransferases by LXR and Its Implication in Pathophysiology

The goal of this project is to study the transcriptional regulation of phase II sulfotransferases by LXR and the implications of this regulation in bile acid detoxification and estrogen metabolism. (This grant is currently in its one-year no-cost extension effective 12/01/11 – 11/30/2012) Role: PI

National Institute of Health, NIDDK, R01 DK076962 09/01/09 – 06/30/2011

The Hepatoprotective Role of the Orphan Nuclear Receptor LXR

The goal of this study is the regulation of drug metabolizing enzymes and transporters by nuclear receptor LXR and the implication of this regulation in preventing acetaminophen toxicity. Role: PI

National Institute of Health, NIEHS, R21 ES019629

01/01/2011 – 12/31/2012

The Regulation of Human Hydroxysteroid Sulfotransferase by Nuclear Receptor ROR

The goal of this project is to study the role of ROR in the regulation of human SULT2A1 gene. Role: PI
