# CURRICULUM VITAE

**Professional Affiliation** XINGGUO CHENG

Associate professor (Toxicology & Pharmacology)

Department of Pharmaceutical Sciences
College of Pharmacy and Health Sciences
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## EDUCATIONAL QUALIFICATION:

| Degree | Major | Mentor(s) | School | Location | Gradation time |
|---|---|---|---|---|---|
| B.Sc. | Biology Base Class | | Wuhan Univ. | Wuhan City, Hubei, P. R. China | 7/1997 |
| M.Sc. | Zoology | Prof. Qingming, Yi<br>Prof. Shiqian, Huang | Wuhan Univ. | Wuhan City, Hubei, P. R. China | 7/2000 |
| Ph.D. | Toxicology | Prof. Curtis D. Klaassen | Univ. of Kansas Medical Center | Kansas City, Kansas, USA | 11/2005 |

## PROFESSIONAL AND TEACHING EXPERIENCE:

| | | |
|---|---|---|
| Research Assistant | School of Life Science, Wuhan University, P. R. China | 8/1997 – 7/2000 |
| Teaching Assistant | Interdisciplinary Graduate Program (IGPBS), University of Kansas Medical Center, USA | 8/2000 – 7/2001 |
| Research Assistant | Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, USA | 8/2001 – 12/2005 |
| Postdoctoral Fellow | Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, USA | 1/2006 - 6/2009 |
| Research Assistant Professor | Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, USA | 7/2009 – 1/2012 |
| Research Assistant Professor | Department of Internal Medicine, University of Kansas Medical Center, USA | 2/2012-8/2012 |
| Assistant Professor | Department of Pharmaceutical Sciences, St. John's University, USA | 9/2012-8/2018 |
| National academies education fellow in the life science | National Academies Summer Institutes on Undergraduate Education (Stony Brooks University, USA) | 8/2013 |
| Associate Professor | Department of Pharmaceutical Sciences, St. John's University, USA | 8/2018-present |

## ACADEMIC SOCIETIES:

| | |
|---|---|
| Central States-SOT (CS-SOT) | 2002-2012 |
| Mid-Atlantic SOT (MASOT) | 2012-present |
| American National Society of Toxicology (SOT) | 2003-present |
| Sigma Xi Society | 2008-2011 |
| American Association of Colleges of Pharmacy (AACP) | 2012-present |
| American Society for Pharmacology and Experimental Therapeutics (ASPET) | 2015-present |
| American Society for Biochemistry and Molecular Biology (ASBMB) | 2016-present |
| Chinese Society of Toxicology | 2014-present |

## AWARDS:

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|---|---|
| 2003 | KUMC graduate student research travel award |
| 2004 | KUMC graduate student research travel award |
| 2005 | KUMC graduate student research travel award |
| 2015 | St. John's University Summer Support of Research Award |
| 2013 | National academies education fellow in the life science (2013-2014) |
| 2014 | St. John's University 2014 Recognition Award |
| 2015 | St. John's University 2015 Recognition Award |
| 2015 | St. John's University Summer Support of Research Award |
| 2016 | St. John's University 2016 Recognition Award |
| 2017 | St. John's University Summer Support of Research Award |
| 2017 | St. John's University 2017 Recognition Award |

## Courses Taught at St. John's University:

### Undergraduate Courses

1. PHS2201: Biopharmaceutical Chemistry
2. TOX4413: Analytic & Quantitative Toxicology
3. TOX5301: Toxicology and Drugs of Abuse (Pharmacy)

### Graduate Courses (to Toxicology major)

1. TOX223: Liver & Kidney Toxicology (Liver section)
2. TOX230: Toxicology Journal Club
3. TOX215: Analytical Methods in Toxicology
4. TOX103: Toxicology II
5. TOX201: Methods Toxicological Evaluation

## KEYWORDS OF ONGOING RESEARCH WORK:

Drug metabolism/transport/disposition

Fibroblast growth factor 21/Fgf21

Herbal medicine Goldenseal/Berberine

Environmental toxicants perfluorinated chemicals

Liver pharmacology/toxicology

## CURRENT RESEARCH SUPPORTS:

Internal Seed grant

Department weekly research support

Private research funds

**RESEARCH INTERESTS:**

1. Perfluorocarboxylic acids (PFCAs) including perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), and perfluorodecanoic acid (PFDA) have been used for decades to make products that resist heat, oil, stains, grease, and water, such as in stain-resistant carpets and fabrics, in the manufacture of non-stick cookware and fire-fighting foam, as well as in other industrial applications. In recent years, perfluorochemicals have become a public health concern because of their environmental persistence and emerging toxicities. The concentration of one of these PFCAs, namely PFNA, continues to increase in human blood. PFCAs cause toxicities in multiple tissues including liver, thymus, spleen, testis, and thyroid gland. In addition, PFCAs, especially the so-called "Teflon chemicals" including PFOA, PFNA, and PFDA, have been generally considered as "likely human carcinogens". However, the underlying mechanisms remain unclear. Our previous data showed that PFCAs decrease mRNAs of hepatic uptake transporters Oatps (organic anion-transporting polypeptides) and Ntcp (sodium-taurocholate cotransporting polypeptide), but increase mRNAs of hepatic efflux transporters Mrps (multidrug resistance-associated protein) and cytochrome p450 (Cyps) in mouse liver through activation of PPARα, CAR, and/or Nrf2 transcriptional factors. One of my ongoing projects is to determine the molecular mechanism by which PFCAs induce hepatomegaly and hepatocarcinomas. Moreover, my recent studies showed that PFCAs caused cholestasis and liver fibrosis, two widely diagnosed but poorly understood liver disorders in humans. ***One of our future studies is to characterize the molecular mechanism responsible for PFCA-induced hepatomegaly, cholestasis, and liver fibrosis, the predisposal symptoms of hepatocarcinomas.***

2. Bile formation and drug detoxification are two major function of the liver. Uptake transporters (e.g. sodium-dependent taurocholate cotransporting polypeptide [Ntcp] and organic anion-transporting polypeptides [Oatps]), drug-metabolizing enzymes, and efflux transporters (e.g. bile salt export pump [Bsep] and multidrug resistance-associated proteins [Mrps]) are coordinately regulated to facilitate bile flow and drug detoxification. Impairment or dysfunction of transporter proteins often leads to liver diseases, such as cholestasis, liver fibrosis, and hepatocarcinomas. Cholestasis is a condition in which bile flow from the liver to the duodenum is blocked, which is often associated with down-regulation of Ntcp and Bsep, two major liver bile-acid transporters. Our recent studies showed that berberine, an active component of widely consumed herbal medicines including goldenseal and goldthread, increases expression of Ntcp and Bsep, as well as bile-acid biosynthesis enzyme Cyp7a1 in mouse liver. This is the first identified chemical that appears to up-regulate Ntcp, Cyp7a1, and Bsep simultaneously. This may provide a new therapeutic strategy

to prevent drug-induced cholestasis. Moreover, we further demonstrated that berberine induced Ntcp expression in cultured mouse and human hepatocytes. ***One of our future directions will determine the molecular mechanism responsible for regulation of bile-acid processing genes by Berberine and its chemical analogs.***

3. Fibroblast growth factor (Fgf) 21, a recently characterized master regulator of glucose and lipid metabolism, is a potential therapeutic candidate to treat type-2 diabetes and metabolic syndrome. Our recent studies indicate that Fgf21 is marked up-regulated by AhR ligands (TCDD and bilirubin) and GR ligand (dexamethasone) in mouse and human liver. ***One of our future research projects will characterize the regulation of Fgf21 and its pathophysiological implications.***

4. Assessment of drug delivery in the small intestine. Orally administered drugs are primarily absorbed in the small intestine through free diffusion, transporter/carrier-mediated transport, and paracellular absorption via tight junction. Drug bioavailability is significantly influenced by first-pass effects of liver and small intestine, for instance by CYP3A4-mediated metabolism and p-glycoprotein-mediated drug efflux. In addition, drug bioavailability is also influenced by drug formulation. ***One of our future research projects will investigate how individual or mixed components of drug formula impact the drug absorption in the small intestine by performing Caco2 permeability study, OATP1A2/2B1 transport assay, CYP3A4 inhibition study, and p-glycoprotein inhibition study.***

## BOOK CHAPTER(S):

1. Klaassen CD and **Cheng X** (2007) Chapter 20: Age- and Gender-related Differences in Xenobiotic Transporter Expression, in Book: Drug Transporters: Molecular Characterization and Role in Drug Disposition, Edited by Morris ME and You G, Wiley Series in Drug Discovery and Development.

## PUBLICATIONS IN PEER-REVIEWED JOURNALS:

38. Le Y, Chen L, Zhang Y, Bu P, Dai G, and **Cheng X**. Epalrestat stimulated oxidative stress, inflammation and fibrogenesis in mouse liver. Toxicol Sci., 163:397-408, 2018. PMID: 28204799; Impact factor: 4.081

37. Zhang Y, Zhang YC, Klaassen CD, and **Cheng X**. Alteration of bile acid and cholesterol biosynthesis and transport by perfluorononanoic acid (PFNA) in mice. Toxicol Sci., 162:225-233, 2018. PMID: 29112762. Impact factor: 4.081

36. Bu P, Le Y, Zhang Y, Zhang YC, and **Cheng X**. Berberine-induced inactivation of signal transducer and activator of transcription 5 signaling promotes male-specific expression of a bile-acid uptake transporter. J Biol Chem., 292:4602-4613, 2017. PMID: 28154180; Impact factor: 4.125

35. Vispute S, Bu P, Le Y, and **Cheng X**. Activation of GR but not PXR by dexamethasone attenuated acetaminophen hepatotoxicities via Fgf21 induction. Toxicology; 378: 95-106, 2017. PMID: 28088388; Impact factor: 3.582

34. Bu P, Le Y, Zhang Y, and **Cheng X**. Hormonal and chemical regulation of the Glut9 transporter in mice. J Pharmacol Exp Ther.; 360:206-214, 2017. PMID: 27807007; Impact factor: 3.867

33. Bu P, Ji Y, Narayanan S, Dalrymple D, **Cheng X**, Serajuddin AT. Assessment of cell viability and permeation enhancement in presence of lipid-based self-emulsifying drug delivery systems using Caco-2 cell model: Polysorbate 80 as the surfactant. Eur J Pharm Sci., 99: 350-360, 2016. PMID: 28024890; Impact factor: 3.756

32. Rockwell CE, Turley AE, **Cheng X**, Fields PE, Klaassen CD. Persistent alterations in immune cell populations and function from a single dose of perfluorononanoic acid (PFNA) in C57Bl/6 mice. Food Chem Toxicol. 100:24-33, 2016. PMID: 27939831; Impact factor: 3.778

31. Bu P, Narayanan S, Jirwankar P, Dalrymple D, **Cheng X**, and Serajuddin A. Cytotoxicity assessment of lipid-based self-emulsifying drug delivery system with Caco-2 cell model: Cremophor EL as the surfactant. Eur J Pharm Sci., 91:162-71, 2016. PMID: 27328127; Impact factor: 3.756

30. **Cheng X**, Gu J, and Klaassen CD. Adaptive hepatic and intestinal alterations in mice after deletion of NADPH-cytochrome P450 oxidoreductase (Cpr) in hepatocytes. Drug Metab Dispos., 42: 1826-33, 2014. PMID: 25147274; Impact factor: 4.242

29. Hou WY, Xu SF, Zhu QN, Lu YF, **Cheng X**, and Liu J. Age-and sex-related differences of organic anion-transporting polypeptide gene expression in livers of rats. Toxicol Appl Pharmacol., 280: 370-377, 2014. PMID: 25168429; Impact factor: 3.791

28. **Cheng X,** Zhang Y, and Klaassen CD. Decreased bile-acid synthesis in livers of hepatocyte-conditional NADPH-cytochrome-p450 reductase-null mice results in increased bile acids in serum. J Pharmacol Exp Ther; 351: 105-13, 2014. PMID: 25034404; Impact factor: 3.867

27. **Cheng X**, Vispute S, Liu J, Cheng C, Kharitonenkov A, and Klaassen CD. Fibroblast growth factor 21 is a target gene of aryl hydrocarbon receptor. Toxicol Appl Pharmacolo., 278: 65-71, 2014. PMID: 24769090; Impact factor: 3.791

26. Rockwell CE, Turley AE, **Cheng X**, Fields PE, Klaassen CD. Acute Immunotoxic Effects of Perfluorononanoic Acid (PFNA) in C57BL/6 Mice. Clin Exp Pharmacol., S4-002: 2161-1459, 2013.

25. **Cheng X** and Klaassen CD. Hormonal and chemical regulation of mouse paraoxonase (Pon) 1 in mice. J Pharmacol Exp Ther., 342: 688-95, 2012. PMID: 22653878.

24. Zhang Y, Csanaky IL, **Cheng X**, Lehman-McKeeman LD, Klaassen CD. Organic anion transporting polypeptide 1a1 null mice are sensitive to cholestatic liver injury. Toxicol Sci. 127:451-62, 2012. PMID: 22461449.

23. Zhang Y, **Cheng X**, Aleksunes LM, Klaassen CD. Transcription factor-mediated regulation of carboxylesterase enzymes in livers of mice. Drug Metab Dispos. 40:1191-7, 2012. PMID: 22429928.

22. Guo Y, Pope C, **Cheng X**, Zhou H, Klaassen CD. Dose-response of berberine on hepatic cytochrome P450 mRNA expression and activities in mice. J Ethnopharmacol, 138: 111-118, 2011. PMID: 21920422.

21. Guo Y, Li F, Ma X, **Cheng X**, Zhou H, Klaassen CD. CYP2D plays a major role in berberine metabolism in liver of mice and humans. Xenobiotica, 41: 996-1005, 2011. PMID: 21787170.

20. **Cheng X** and Klaassen CD. Tissue distribution, ontogeny, and hormonal regulation of xenobiotic transporters in mouse kidneys. Drug Metab Dispos. 37:2178-85, 2009. PMID: 19679677.

19. Cui Y, **Cheng X**, Weaver YM, and Klaassen CD. Tissue distribution, gender-divergent expression, ontogeny and chemical induction of multidrug resistance transporter genes (Mdr1a, Mdr1b, and Mdr2) in mice. Drug Metab Dispos. 37:203-10, 2009. PMID: 18854377.

18. **Cheng X** and Klaassen CD. Critical role of PPARα in perfluorooctanoic acid- and perfluorodecanoic acid-induced down-regulation of Oatp uptake transporters in mouse livers. Toxicol Sci. 106: 37-45, 2008. PMID: 18703564.

17. **Cheng X** and Klaassen CD. Perfluorocarboxylic acids induce cytochrome p450 enzymes in mouse liver through activation of PPAR{alpha} and CAR transcription factors. Toxicol Sci. 106: 29-36, 2008. PMID: 18648086.

16. Lickteig AJ*, **Cheng X*,** Augustine LM, Klaassen CD, Cherrington NJ. Tissue distribution, ontogeny and induction of the transporters Multidrug and toxin extrusion (Mate) 1 and Mate2 in mice. Life Sci. 83:59-64, 2008. PMID: 18573474. (* Co-first author)

15. Lu H, Choudhuri S, Ogura K, Csanaky IL, Lei X, **Cheng X**, Song PZ, Klaassen CD. Characterization of organic anion transporting polypeptide 1b2-null mice: essential role in hepatic uptake/toxicity of phalloidin and microcystin-LR. Toxicol Sci. 103:35-45, 2008. PMID: 18296417.

14. **Cheng X**, Buckley D, Klaassen CD. Regulation of hepatic bile acid transporters Ntcp and Bsep mRNA expression in mice. Biochem Pharmacol, 74: 1665-1676, 2007. PMID: 17897632.

13. Pacyniak EK, **Cheng X**, Cunningham M, Crofton K, Klaassen CD, and Guo GL. The flame retardants, polybrominated diphenyl ethers (PBDE), are pregnane-X receptor (PXR) activators. Toxicol Sci. 97:94-102, 2007. PMID: 17324954.

12. Chen C, **Cheng X**, Dieter MZ, Klaassen CD. Activation of cyclic AMP (cAMP)-dependent signaling pathway induces mouse organic anion transporting polypeptide 2 (Oatp2) expression. Mol Pharmacol. 71:1159-64, 2007. PMID: 17244698.

11. **Cheng X** and Klaassen CD. Regulation of mRNA expression of xenobiotic transporters by the pregnane-X receptor (PXR) in mouse liver, kidney, and intestine. Drug Metab Dispos. 34:1863-7, 2006. PMID: 16928788.

10. Maher JM, Slitt AL, Callaghan TN, **Cheng X**, Cheung C, Gonzalez FJ, Klaassen CD. Alterations in transporter expression in liver, kidney, and duodenum after targeted disruption of the transcription factor HNF1alpha. Biochem Pharmacol. 72:512-22, 2006. PMID: 16806085.

9. **Cheng X**, Maher JM, Lu H, Klaassen CD. Endocrine regulation of gender divergent expression of mouse organic anion transporting polypeptides (Oatps), Mol Pharmacol, 70:1291-7, 2006. PMID: 16807376.

8. Maher JM, **Cheng X**, Tanaka Y, Scheffer GL, Klaassen CD. Hormonal regulation of renal multidrug resistance-associated proteins 3 and 4 (Mrp3 and Mrp4) in mice. Biochem Pharmacol. 71:1470-8, 2006. PMID: 16529719.

7. **Cheng X**, Maher JM, Dieter MZ, Klaassen CD. Regulation of mouse organic anion transporting polypeptides (Oatps) in liver by prototypical microsomal enzyme inducers that activate distinct transcription factor pathways. Drug Metab Dispos. 33: 1276-82, 2005. PMID: 15919853.

6. **Cheng X**, Maher JM, Chen C, Klaassen CD. Tissue distribution and ontogeny of mouse organic anion transporting polypeptides (Oatps). Drug Metab Dispos. 33:1062-73, 2005. PMID: 15843488.

5. Maher JM, **Cheng X**, Slitt AL, Dieter MZ, Klaassen CD. Induction of the multidrug resistance-associated protein family of transporters by chemical activators of receptor-mediated pathways in mouse liver. Drug Metab Dispos. 33:956-62, 2005. PMID: 15833929.

4. Maher JM, Slitt AL, Cherrington NJ, **Cheng X**, Klaassen CD. Tissue distribution and hepatic and renal ontogeny of the multidrug resistance-associated protein (Mrp) family in mice. Drug Metab Dispos. 33:947-55, 2005. PMID: 15802388.

3. Dieter MZ, Maher JM, **Cheng X**, Klaassen CD. Expression and regulation of the sterol half-transporter genes ABCG5 and ABCG8 in rats. Comp Biochem Physiol C Toxicol Pharmacol. 139:209-18, 2004. PMID: 15683829.

2. **Cheng X**, Chen N, Pen J, Yi Q. High expression of corn Kn-1 homeobox in *E. coli.* Wuhan University Journal of Natural Science; 46: 219-221, 2000. (In Chinese)

1. **Cheng X**, Chen N, Yi Q. High expression of a rice homeobox in *E. coli*. Wuhan University Journal of Natural Science (English Edition); 4: 487-490, 1999.

## RESEARCH ABSTRACTS:

32. Zhang Y and **Cheng X**. Up-regulation of fibroblast growth factor (Fgf) 21 by Cisplatin in mouse liver and hepatoma cells. Submitted to the Society of Toxicology's 57th Annual National Meeting, held in San Antonio, TX, March 11-15, 2018.

31. Le Y and **Cheng X**. Perfluorononanoic acid (PFNA) activates Nrf2 by suppressing autophagy in mouse liver and human hepatoma cells. Submitted to the Society of Toxicology's 57th Annual National Meeting, held in San Antonio, TX, March 11-15, 2018.

30. Zhang Y, Le Y, Zhang YC, **Cheng X**. Alteration of bile acid profile by perfluorononanoic acid (PFNA) in mice. Submitted to the Society of Toxicology's 56th Annual Meeting, held in Baltimore, MD, March 12-16, 2017.

29. Le Y, Bu P, **Cheng X**. Berberine induced Ntcp/NTCP expression via inactivation of Stat5 signaling in mouse liver and cultured hepatoma cells. Submitted to the Society of Toxicology's 56th Annual Meeting, held in Baltimore, MD, March 12-16, 2017.
***(Received 2017 SOT Graduate student travel support award.)***

28 Chen L and **Cheng X**. Epalrestat causes apparent apoptosis in cultured mouse and human hepatoma cells. Submitted to the Society of Toxicology's 55th Annual Meeting, held in New Orleans, LA, March 13-17, 2016.

27. Le Y and **Cheng X**. Perfluorinated compounds activate Nrf2 via inhibiting autophagy in human and mouse liver/hepatoma cells. Submitted to the Society of Toxicology's 55th Annual Meeting, held in New Orleans, LA, March 13-17, 2016.

26. Vispute S, Le Y, Chen L, **Cheng X**. Lead acutely induced fibroblast growth factor 21 in mouse liver and hepatocytes. Submitted to the Society of Toxicology's 55th Annual Meeting, held in New Orleans, LA, March 13-17, 2016.

25. Chen L and **Cheng X**. Epalrestat causes apparent apoptosis in cultured mouse and human hepatoma cells. Submitted to the St. John's University Research Month 2016 event

24. Le Y and **Cheng X**. Perfluorinated compounds activate Nrf2 via inhibiting autophagy in human and mouse liver/hepatoma cells. Submitted to the St. John's University Research Month 2016 event

23. Bu P, Narayana S, Jirwankar P, Dalrymple, Culver M, **Cheng X**, Serajuddin A. Toxic or not: effect of lipid, surfactant and lipid-surfactant mixture on viability of Caco-2 cells. Submitted to 2015 AAPS Annual Meeting and Exposition, held in Orlando, FL, October 25-29, 2015.
***(Received 2015 AAPS travel award.)***

22. Vispute S, Bu P, Le Y, and **Cheng X** (2014) Fibroblast growth factor (Fgf) 21 is a novel target gene of glucocorticoid receptor. Submitted to 2015 Annual ASPET Experimental Biology meeting.
***(Received 2015 National EB (Experimental Biology) student travel award.)***

21. Le Y, Bu P, Zhang Y, Klaassen CD and **Cheng X** (2014) Berberine alters bile-acid homeostasis in mouse liver and hepatocytes. Submitted to 2015 Annual National SOT meeting.

20. Vispute S, Bu P, Le Y and **Cheng X** (2014) Dexamethasone induces growth factor (Fgf) 21 expression via activation of glucocorticoid receptor. Submitted to 2015 Annual National SOT

meeting.
***(Received 2015 National SOT (Society of toxicology) student travel award.)***

19. Chen LM, Patel BA, Talele TT and **Cheng X** (2014) L-phenylalanine-derived rhodanine analog (LPAR) induced diverse cytoprotective mechanisms in cultured mouse and human hepatoma cells. Submitted to 2015 Annual National SOT meeting.

18. Vispute S and **Cheng X** (2013) Dexamethasone induces fibroblast growth factor (Fgf) 21 in humans and mice. Submitted to 2014 Annual National SOT meeting.

17. Vispute S and **Cheng X** (2013) Dexamethasone induces fibroblast growth factor (Fgf) 21 in human and mouse liver. Submitted to MA-SOT fall 2013 scientific meeting, 2013.

16. **Cheng X** and Klaassen CD (2013) Fibroblast growth factor 21 (Fgf21) is a target gene of the Aryl Hydrocarbon Receptor (AhR). The Toxicologist. 132.

15. **Cheng X** and Klaassen CD (2012) Regulation of xenobiotic transporters in mouse kidneys by perfluorocarboxylic acids. The Toxicologist. 126.

14. Guo Y, Li F, Chen Y, Tan ZR, Pope C, **Cheng X**, Ma X, Klaassen CD, and Zhou HH (2011) Cytochrome p450s mediate the metabolism of berberine and the cytochrome p450s are regulated by berberine in mice and humans. The Toxicologist. 120.

13. **Cheng X,** Zhang Y, and Klaassen CD (2010) Hepatocyte-specific deletion of NADPH-cytochrome P450 Reductase (Cpr) in mice disturbs bile-acid homeostasis by minimizing the classical pathway of bile-acid biosynthesis. The Toxicologist. 114.

12. **Cheng X**, Gu J, and Klaassen CD (2008) Adaptive regulation after hepatocyte-specific loss of NADPH-cytochrome p450 reductase (Cpr) in mice. The Toxicologist. 102.

11. **Cheng X**, Maher JM, Barkley D, and Klaassen CD (2007) Constitutive regulation of hepatic bile acid transporters Ntcp and Bsep. The Toxicologist. 96: 987.

10. Pacyniak EK, **Cheng X**, Sanders M, Cunningham M, Crofton K, Kramer K, Klaassen CD, and Guo GL (2007) PBDE congeners are PXR activators. The Toxicologist. 96: 872.

9. Cui Y, **Cheng X**, and Klaassen CD (2007) Tissue distribution, gender difference, ontogeny and chemical induction of multiple drug resistance genes (MDT1A, MDR1B, MDR2) in mice. The Toxicologist. 96: 344.

8. Buckley DB, Maher JM, **Cheng X**, and Klaassen CD (2006) Gender-dependent mRNA expression of mouse UDP-glucuronosyltransferases (UGTs): Regulation by androgens and male-pattern growth hormone secretion. The Toxicologist. 90: 1361.

7. **Cheng X**, Maher JM, Lu H, and Klaassen CD (2006) Endocrine regulation of gender divergent expression of mouse organic anion transporting polypeptides (Oatps). The Toxicologist. 90: 564.

6. Chen C, **Cheng X**, Dieter MZ, and Klaassen CD (2005) Activation of cyclic AMP (cAMP)-dependent signaling pathway induces mouse organic anion transporting polypeptide 2 (Oatp2) expression. Drug Metab. Rev.37:67.

5. Chen C, **Cheng X**, and Klaassen CD (2005) Induction of organic anion transporting polypeptide 2 expression by cyclic AMP-dependent signaling pathway in mouse hepa-1 cells. The Toxicologist.

84: 1220.

4. **Cheng X**, Maher JM, Dieter MZ, and Klaassen CD (2005) Regulation of mouse hepatic transporters by perfluorodecanoic acid (PFDA). The Toxicologist. 84: 564.

3. Brady JM, **Cheng X**, Maher JM, and Klaassen CD (2004): Multiple drug resistance gene regulation in mice. The Toxicologist. 78: 1516.

2. **Cheng X** and Klaassen CD (2004) Regulation of mouse organic anion transporting polypeptides (Oatps) in mouse liver by classes of prototypical microsomal enzyme inducers that activate various transcriptional pathways. The Toxicologist. 78: 1468.

1. **Cheng X**, Cherrington NJ, and Klaassen CD (2003) Tissue distribution of mouse organic anion transporting polypeptides. The Toxicologist. 72: 1252.

## LABOROTARY MEMBERS:

### Postdoctoral fellow(s)/Visiting scholar(s)

### Graduate student(s)

| | | | |
|---|---|---|---|
| Yuan (Cindy) Le | PhD candidate | Toxicology | 2/2014- |
| Yue Zhang | PhD student | Pharmacology | 6/2016- |
| Nabeela Fatima Baig | PhD student | Pharmacology | 4/2018- |

### Undergraduate student(s)

| | | | |
|---|---|---|---|
| Yue Ji | | Biology | 2/2015- |

### Previous laboratory member(s)

| | | | |
|---|---|---|---|
| Saurabh Vispute | PhD<br>(Now: Charles River Laboratories) | Pharmacology | 3/2013-12/2015 |
| Liming (Dawn) Chen | MS<br>(Now: U. Connecticut) | Pharmacology | 2/2014-8/2016 |
| Pengli Bu | Postdoctoral fellow/Visiting scholar | Toxicology | 4/2014-1/2017 |
| Kelley Chiu | High-school Researcher | | 6/2017-8/2017 |