Guohua An, MD, PhD

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EMPLOYMENT

July 2020 –present	Associate Professor Division of Pharmaceutics and Translational Therapeutics College of Pharmacy University of Iowa Iowa City, Iowa
Sep 2014 – June 2020	Assistant Professor Division of Pharmaceutics and Translational Therapeutics College of Pharmacy University of Iowa Iowa City, Iowa
Dec 2012 – Aug 2014	Assistant Professor Center for Pharmacometrics and Systems Pharmacology Department of Pharmaceutics (Orlando Campus) College of Pharmacy University of Florida Orlando, Florida
Aug 2010 – Nov 2012	Senior Clinical Pharmacokineticist Department of Clinical Pharmacology and Pharmacometrics Global Pharmaceutical R&D Abbott Laboratories Abbott Park, Illinois
2003 – 2005	Clinical Pharmacist and Research Scientist Clinical Pharmacology Lab Department of Pharmacy Ruijin Hospital Shanghai, China

EDUCATION

2005~2010 Ph.D. in Pharmaceutical Sciences, SUNY at Buffalo, Buffalo, NY, USA

<u>*Ph.D. Project:*</u> The effects of flavonoids on the BCRP-mediated pharmacokinetics and pharmacodynamics of Mitoxantrone (PhD Advisor: Marilyn E. Morris)

2000~2003 M.S. in Clinical Pharmacology, Fudan University, Shanghai, China

1995~2000 M.D. Taishan Medical College, Shandong, China

PROFESSIONAL EXPERIENCE

2010 Aug ~ 2012 Nov	Senior Clinical Pharmacokineticist		
	Department of Clinical Pharmacology and Pharmacometrics		
	Global Pharmaceutical R&D		
	Abbott Laboratories		

Clinical Study Support

- Provided scientific and technical input to clinical protocols, clinical development plans, investigator's brochure and clinical pharmacology section of regulatory filing documents
- Author and reviewer of 14 Phase I clinical study reports, 4 Phase 2 clinical study reports, and 1 Phase 3 clinical study report
- Provided modeling& simulation support for dose selection and clinical trial design for Phase 1, Proof of Concept and Phase 2b studies
- Developed various mechanistic modeling (e.g. PK/PD modeling on uric acid, exposureresponse model on pain intensity, exposure-heart rate model, exposure-adverse event model, exposure-adverse event-dropout model, target-mediated drug disposition model and drugdrug interaction model)
- Predicted PK behavior of two ABT compounds in humans and recommended the first-inhuman dose based on in vitro-in vivo correlation and allometric scaling analysis
- Predicted drug-drug interaction in humans based on the preclinical data for one ABT compound.
- Wrote a white paper on the pharmacokinetic interaction between valproic acid (Depakote) and ritonavir (Norvir) to support the labeling update of Depakote

Research Projects

- Exposure-response Modeling for Pharmacokinetics, Efficacy, Safety and Dropout of ABT-652 in Subjects with Osteoarthritic Pain.
- > CYP3A-Mediated Interaction Model between ABT-384 and Ketoconazole in Humans.
- Population Pharmacokinetics and Pharmacodynamic Modeling of ABT-639 after Single and Multiple Dose Administration in Healthy Volunteers
- Development of Target-Mediated Drug Disposition (TMDD) Model to Explain Unusual Nonlinear PK of ABT-384 in Human
- Model-based Meta-Analysis (MBMA) on the Pain Related Endpoints in OA Pain Clinical Trials.
- 2003 ~2005 Clinical Pharmacist and Research Scientist Clinical Pharmacology Lab, Department of Pharmacy. Ruijin Hospital, Shanghai, China

1999 ~ 2000 Medical Intern, rotations in the First Affiliated Hospital Taishan Medical College. China

PUBLICATIONS

Book Chapters

- <u>An G</u> and Morris ME. Chapter 22 of the book *Enzyme- and Transporter-Based Drug-Drug Interactions- Progress and Future Challenges*, book edited by Pang KS, Rodrigues AD and Peter RM. Springer **2010**, pp.555-584. ISBN-10: 1441908390
- <u>An G</u> and Morris ME. Chapter 3 of the book *Drug Efflux Pumps in Cancer Resistance Pathways: From Molecular Recognition to Inhibition Strategies in Chemotherapy*. book edited by Alejandro Sosnik, Reina Bendayan. Springer **2020.** ISBN-10: 0128164344.

Peer-Reviewed Articles

Complete List of Published Work in MyBibliography (total 84 peer-reviewed publications) <u>https://www.ncbi.nlm.nih.gov/myncbi/1NU3b-piulp5-/bibliography/public/</u>

- <u>An G*</u>, Creech B, Wu N, Nation RL, Gu K, Nalbant D, Jimenez-Truque N, Fissell W, Rolsma S, Patel P, Watanabe A, Fishbane N, Kirkpatrick CMJ, Landersdorfer CB, and Winokur P,* Evaluation of Empirical Dosing Regimens for Meropenem in ICU Patients Using Population Pharmacokinetic Modeling and Target Attainment Analysis. *Antimicrob Agents Chemother* 2022 [In press] * Corresponding author
- Bach T, Wu N, <u>An G*</u>. Pharmacometric Model of Agalsidase-Migalastat Interaction in Human: A Novel Mechanistic Model of Drug-Drug Interaction Between a Therapeutic Protein and a Small Molecule. *Journal of Pharmacokinetics and Pharmacodynamics* 2022 Nov 14. doi: 10.1007/s10928-022-09830-y. * Corresponding author PMID: 36376611
- <u>An G*</u>, Katz D. Importance of target-mediated drug disposition (TMDD) of small-molecule compounds and its impact on drug development example of the class effect of HSD-1 inhibitors. Journal of Clinical Pharmacology 2022 doi: 10.1002/jcph.2185. Online ahead of print * Corresponding author PMID: 36479709
- Hemmersbach-Miller M, Mvic SJB, Winokur P; Landersdorfer C; Gu K, Chan AW, Cohen-Wolkowiez M, Conrad T, <u>An G</u>, Kirkpatrick C, Swamy GK, Walter EB, Schmader KE. Population Pharmacokinetics of Piperacillin/Tazobactam across the Adult Lifespan. *Clinical Pharmacokinetics*. 2022 [accepted]
- 5. Wu N, Widness, JA, Yan X, Veng-Pedersen P, and <u>An G</u>*. A full Target-Mediated Drug Disposition (TMDD) model to explain the changes in recombinant human erythropoietin (rhEpo) pharmacokinetics in patients with different bone marrow integrity following hematopoietic transplantation. *J Pharm Sci* 2022;111(9):2620-2629. doi: 10.1016/j.xphs.2022.06.003.
 * Corresponding author PMID: 35691608
- 6. Bach T, and <u>An G</u>*. Importance of Utilizing Natural Isotopologue Transitions in Expanding the Linear Dynamic Range of LC-MS/MS Assay for Small-Molecule Pharmacokinetic Sample

Analysis – a Mini-review. J Pharm Sci **2022**;111(5):1245-1249. doi: 10.1016/j.xphs.2021.12.012. * **Corresponding author** PMID: 34919967

- Reeder J, Abdallah I, Bach T, Xu Y, Nalbant D, O'Sullivan C, <u>An G*</u>. Development and validation of a simple, fast, and sensitive LC/MS/MS method for the quantification of cefazolin in human plasma and its application to clinical pharmacokinetic study. J Pharm Biomed Anal. 2022 Feb 20;210:114521. doi: 10.1016/j.jpba.2021.114521 * Corresponding author PMID: 34979494
- Bach T, Deye G, Codd E, Horton J, Winokur P, <u>An G</u>*. Population pharmacokinetic-pharmacodynamic model of oxfendazole in healthy adults in a multiple ascending doses and food effect study and target attainment analysis. *Antimicrob Agents Chemother.* 2022 Jan 18;66(1):e0143221. doi: 10.1128/AAC.01432-21. * Corresponding author PMID: 34606333
- Bach T, and <u>An G</u>*. Comparing the Performance of First-Order Conditional Estimation (FOCE) and Different Expectation-Maximization (EM) Methods in NONMEM: Real Data Experience with Complex Nonlinear Parent-Metabolite Pharmacokinetic Model. *Journal of Pharmacokinetics and Pharmacodynamics* 2021 Aug;48(4):581-595. doi: 10.1007/s10928-021-09753-0 * Corresponding author PMID: 33884580
- Wu N, Katz D, and <u>An G</u>*. A Target-Mediated Drug Disposition (TMDD) Model to Explain Non-Linear Pharmacokinetics of the 11β-Hydroxysteroid Dehydrogenase Type 1 Inhibitor SPI62 in Healthy Adults. *J Clinical Pharmacology* **2021** Nov;61(11):1442-1453. doi: 10.1002/jcph.1925. * Corresponding author PMID: 34110620
- Nalbant D, Reeder J, Li P, O'Sullivan C, Rogers WK, <u>An G*</u>. Development and validation of a simple, fast, and sensitive LC/MS/MS method for the quantification of ampicillin and sulbactam in human plasma and its application to clinical pharmacokinetic study. *J Pharm Biomed Anal.* **2021** March 20;196:113899. doi: 10.1016/j.jpba.2021.113899. * Corresponding author PMID: 33508765
- 12. Bach T, Murry DJ, Stebounova LV, Deye G, Winokur P, and <u>An G*</u> Population Pharmacokinetic Model of Oxfendazole and Metabolites in Healthy Adults following Single Ascending Doses. *Antimicrob Agents Chemother* **2021** March 18;65(4):e02129-20. doi: 10.1128/AAC.02129-20. * Corresponding author PMID: 33526484
- <u>An G</u>*, Lee KSS, Yang J, Hammock BD. Target-Mediated Drug Disposition (TMDD) a Class Effect of Soluble Epoxide Hydrolase (sEH) Inhibitors. *J Clinical Pharmacology* 2021; 61(4):531-537. doi: 10.1002/jcph.1763. * Corresponding author PMID:33078430
- Hong B, D'Cunha R, Li P, Al-Shaer MH, Alghamdi WA, <u>An G</u>, Peloquin C. A systematic review and meta-analysis of isoniazid pharmacokinetics in healthy volunteers and TB patients. *Clinical Therapeutics* 2020 Oct 5:S0149-2918(20)30459-8. doi: 10.1016/j.clinthera.2020.09.009. PMID: 33032843
- 15. Wu N, and <u>An G</u>*. Incorporating target-mediated drug disposition (TMDD) in a whole-body physiologically-based pharmacokinetic (PBPK) model of linagliptin in rat and scale up to human. *The AAPS Journal* 2020 Sep 29;22(6):125. doi: 10.1208/s12248-020-00481-w.
 * Corresponding author PMID: 32996028

- 16. <u>An G</u>*. The Utility of Pharmacometric Models in Clinical Pharmacology Research in Infants. *Current Pharmacology Reports* 2020; 6(5):260-266. DOI 10.1007/s40495-020-00234-5 * Corresponding author PMID: 33767946
- 17. Bach T, Galbiati S, Kennedy J, Deye G, Nomicos E, Codd EE, Garcia HH, Horton J, Gilman RH, Gonzalez AE, Winokur P*, and <u>An G</u>* Pharmacokinetics, Safety, and Tolerability of Oxfendazole in Healthy Adults in an Open Label Phase 1 Multiple Ascending Dose and Food Effect Study. *Antimicrob Agents Chemother* 2020 Oct 20;64(11):e01018-20. doi: 10.1128/AAC.01018-20. * Corresponding author PMID: 32816721
- Alghamdi WA, Al-Shaer MH, <u>An G</u>, Alsultan A, Kipiani M, Barbakadze K, Mikiashvili L, Cegielski PJ, Kempker RR, Peloquin CA. Population Pharmacokinetics of Linezolid in TB Patients: Dosing Regimens Simulation and Target Attainment Analysis. *Antimicrob Agents Chemother* 2020;64(10):e01174-20. doi: 10.1128/AAC.01174-20. PMID: 32778547
- Al-Shaer MH, Märtson AG, Alghamdi WA, Alsultan A, <u>An G</u>, Ahmed S, Alkabab Y, Banu S, Houpt ER, Ashkin D, Griffith DE, Cegielski JP, Heysell SK, Peloquin CA. Ethionamide population pharmacokinetic model and target attainment in multidrug-resistant tuberculosis. *Antimicrob Agents Chemother* 2020;64(9):e00713-20. doi: 10.1128/AAC.00713-20 PMID: 32631828
- Wu N, Hammock BD, Lee KSS*, <u>An G*</u>. Simultaneous Target-Mediated Drug Disposition (TMDD) Model for Two Small-Molecule Compounds Competing for Their Pharmacological Target: Soluble Epoxide Hydrolase. *Journal of Pharmacology and Experimental Therapeutics* 2020;374(1):223-232 PMID:32238455 * Corresponding author
- 21. Carroll PD, Zimmerman BM, Nalbant D, Gingerich EL, <u>An G</u>, Cress GA, Veng-Pedersen P, Widness JA. Neonatal umbilical arterial catheter removal is accompanied by a marked decline in phlebotomy blood loss. *Neonatology* **2020**;117(3):294-299. PMID: 32564030
- 22. <u>An G*</u>, Bach T, Abdallah I, Nalbant D. Aspects of Matrix and Analyte Effects in Clinical Pharmacokinetic Sample Analyses using LC-ESI/MS/MS Two Case Examples. *J Pharm Biomed Anal.* 2020; 183:113135. PMID:32062015 * Corresponding author
- 23. <u>An G</u>*. Concept of Pharmacologic Target-Mediated Drug Disposition (TMDD) in Large-Molecule and Small-Molecule Compounds. *Journal of Clinical Pharmacology*. 2020;60(2):149-163. PMID:31793004 * Corresponding author
- 24. D'Cunha R, Schmidt R, Widness JA, Mock DM, Yan X, Cress GA, Kuruvilla D, Veng-Pedersen P, <u>An G*</u>. Target-Mediated Disposition Population Pharmacokinetics Model of Erythropoietin in Premature Neonates Following Multiple Dosing Regimens. *European Journal of Pharmaceutical Sciences*. 2019; 138:105013. PMID:31340188 * Corresponding author
- 25. D'Cunha R, Murry DJ, <u>An G</u>*. Nilotinib alters the efflux transporter-mediated pharmacokinetics of afatinib in mice. *Journal of Pharmaceutical Sciences*. 2019; 108(10): 3434-3442. PMID: 31163185 * Corresponding author
- 26. Al-Shaer MH, Alghamdi WA, Alsultan A, <u>An G</u>, Ahmed S, Alkabab Y, Banu S, Barbakadze K, Houpt E, Kipiani M, Mikiashvili L, Cegielski JP, Kempker RR, Heysell SK, Peloquin CA. Fluoroquinolones in drug-resistant tuberculosis: culture conversion and pharmacokinetic/pharmacodynamic target attainment to guide dose selection. *Antimicrob Agents Chemother*. 2019; 63(7):e00279-19. PMID: 31061152

- 27. Bach T, Bae S, D'Cunha R, Winokur P, <u>An G</u>*. Development and validation of a simple, fast, and sensitive LC/MS/MS method for the quantification of oxfendazole in human plasma and its application to clinical pharmacokinetic study. *J Pharm Biomed Anal.* 2019;171:111-117. PMID: 30981954 * Corresponding author
- 28. Alghamdi, WA, Alsultan, A, Al-Shaer, MH, <u>An G</u>, Ahmed S, Alkabab Y, Banu S, Barbakadze K, Houpt E, Kipiani M, Mikiashvili L, Schmidt S, Heysell SK, Kempker RR, Cegielski P, Peloquin CA. Cycloserine Population Pharmacokinetics and Pharmacodynamics in Patients with Tuberculosis. *Antimicrob Agents Chemother.* **2019** Apr 25;63(5):e00055-19. PMID: 30858211
- 29. <u>An G</u>*, Murry DJ, Gajurel K, Bach T, Deye G, Stebounova LV, Codd EE, Horton J, Gonzalez AE, Garcia HH, Ince D, Hodgson-Zingman D, Nomicos EYH, Conrad T, Kennedy J, Jones W, Gilman RH, Winokur P*. Pharmacokinetics, Safety, and Tolerability of Oxfendazole in Healthy Volunteers: a Randomized, Placebo-Controlled First-in-Human Single-Dose Escalation Study. *Antimicrob Agents Chemother.* **2019** Mar 27;63(4):e02255-18. PMID: 30745383 * Corresponding author
- 30. D'Cunha R, Widness JA, Yan X, Schmidt R, Veng-Pedersen P, <u>An G*</u>. A Mechanism-Based Population Pharmacokinetics Model of Erythropoietin in Premature Infants and Healthy Adults Following Multiple Intravenous Doses *Journal of Clinical Pharmacology* 2019;59(6):835-846 PMID:30618050 * Corresponding author
- 31. Bach T, Jiang Y, Zhang X, <u>An G*</u>. General Pharmacokinetic Features of Small-Molecule Compounds Exhibiting Target-Mediated Drug Disposition (TMDD): A Simulation-Based Study. *J Clin Pharmacol.* 2019;59(3):394-405. PMID: 30387863 *Corresponding author
- 32. Yu L, Qi H, <u>An G</u>, Bao J, Ma B, Zhu J, Ouyang G, Zhang P, Fan H, Zhang Q. Association between metabolic profiles in urine and bone mineral density of pre- and postmenopausal Chinese women. *Menopause*. **2019**; 26(1):94-102. PMID: 29975282
- 33. <u>An G</u>*, Schmidt RL, Mock DM, Veng-Pedersen P, Widness JA, Overlooked Issues on Pharmacokinetics Data Interpretation of Protein Drugs-a Case Example of Erythropoietin. *The* AAPS Journal. 2018 Nov 26;21(6):1-4. PMID: 30478521 *Corresponding author
- 34. D'Cunha R, Bach T, Young BA, Li P, Nalbant D, Zhang J, Winokur P, <u>An G*</u>. Quantification of Cefepime, Meropenem, Piperacillin and Tazobactam in Human Plasma using a Sensitive and Robust LC-MS/MS Method- Part I. Assay Development and Validation. *Antimicrob Agents Chemother.* 2018;62(9):e00859-18. PMID:29941654 . *Corresponding author
- 35. D'Cunha R, Bach T, Young BA, Li P, Nalbant D, Zhang J, Winokur P, <u>An G*</u>. Quantification of Cefepime, Meropenem, Piperacillin and Tazobactam in Human Plasma using a Sensitive and Robust LC-MS/MS Method- Part II. Stability Evaluation. *Antimicrob Agents Chemother*. 2018;62(9):e00861-18. PMID:29941653 *Corresponding author
- 36. Marsh E, Verhoven SM, Groszek JJ, Fissell WH, <u>An G</u>, Patel P, Creech B, Shotwell M. Betalactam carryover in arterial and central venous catheters is negligible. *Clin Chim Acta* 2018; 486:265-268. PMID: 30118674
- 37. Mock DM, Nalbant D, Kyosseva SV, Schmidt RL, <u>An G</u>, Matthews NI, Vlaar APJ, van Bruggen R, de Korte D, Strauss RG, Cancelas JA, Franco RS, Veng-Pedersen P, Widness JA. Development, validation, and potential applications of biotinylated red blood cells for posttransfusion kinetics and other physiological studies: evidenced-based analysis and

recommendations. Transfusion. 2018;58(8):2068-2081. PMID: 29770455.

- 38. Bae S, D'Cunha R, Shao J, <u>An G*</u>. Effect of 5,7-dimethoxyflavone on Bcrp1-mediated transport of sorafenib in vitro and in vivo in mice. *European Journal of Pharmaceutical Sciences* 2018;117:27-34. PMID: 29425861 *Corresponding author
- 39. Wang Y, Guo SH, Shang XJ, Yu LS, Zhu JW, Zhao A, Zhou YF, <u>An G</u>, Zhang Q, Ma B. Triptolide induces Sertoli cell apoptosis in mice via ROS/JNK-dependent activation of the mitochondrial pathway and inhibition of Nrf2-mediated antioxidant response. *Acta Pharmacologica Sinica*. 2018;39(2):311-327. PMID: 28905938
- 40. Awasthi R, <u>An G</u>, Donovan MD, Boles Ponto LL. Relating Observed Psychoactive Effects to the Plasma Concentrations of Delta-9-Tetrahydrocannabinol and Its Active Metabolite: An Effect-Compartment Modeling Approach. *Journal of Pharmaceutical Sciences* 2018; 107(2): 745-755. PMID: 28942005
- 41. <u>An G</u>*, Ohls RK, Christensen RD, Widness JA, Mock DM, Veng-Pedersen P. Population Pharmacokinetics of Darbepoetin in Infants Following Single Intravenous and Subcutaneous Dosing. *Journal of Pharmaceutical Sciences*. 2017;106(6):1644-1649. PMID: 28189627
 *Corresponding author
- 42. Jiang Y, Milavetz G, James MO, <u>An G</u>*. A Mechanism-based Pharmacokinetic Enzyme Turnover Model for Dichloroacetic Acid Auto-Inhibition in Rats. *Journal of Pharmaceutical Sciences*. 2017;106(5):1396-1404. PMID: 28163135 * Corresponding author
- *43.* Tang B, Shang X, Qi H, Li J, Ma B, <u>An G</u>, and Zhang Q. Metabonomic analysis of fatty acids in seminal plasma between healthy and asthenozoospermic men based on gas chromatography mass spectrometry. *Andrologia*. **2017**; 49(9): 1-13. PMID: 28124472
- 44. Kuruvilla D, Widness JA, Nalbant D, Schmidt RL, Mock DM, <u>An G</u>, and Veng-Pedersen P. Estimation of Adult and Neonatal RBC Lifespans in Anemic Neonates using RBCs Labeled at Several Discrete Biotin Densities. *Pediatric Research*. **2017**;81(6):905-910. PMID: 28099421
- 45. <u>An G</u>*. Small-Molecule Compounds Exhibiting Target-Mediated Drug Disposition (TMDD): A Minireview. *Journal of Clinical Pharmacology* 2017;57(2):137-150. PMID: 27489162
 * Corresponding author
- 46. D'Cunha R, Bae S, Murry DJ, <u>An G</u>*.TKI combination therapy: strategy to enhance dasatinib uptake by inhibiting Pgp- and BCRP-mediated efflux. *Biopharmaceutics & Drug Disposition*. 2016;37(7):397-408. PMID: 27418107 * Corresponding author
- 47. <u>An G</u>*, Widness JA, Mock DM, Veng-Pedersen P. A Novel Physiology-Based Mathematical Model to Estimate Red Blood Cell Lifespan in Different Human Age Groups. *The AAPS Journal.* 2016;18(5):1182-91. PMID: 27215601 * Corresponding author
- 48. Qi H, Bao J, <u>An G</u>, Ouyang G, Zhang P, Wang C, Ying H, Ouyang P, Ma B, Zhang Q. Association between the metabolome and bone mineral density in pre- and post-menopausal Chinese women using GC-MS. *Molecular Biosystems*. **2016**;12(7):2265-75. PMID: 27168060
- 49. Bi Y, Deng J, Murry DJ, <u>An G</u>*. A Whole-Body Physiologically Based Pharmacokinetic Model of Gefitinib in Mice and Scale-Up to Humans. *The AAPS Journal*. 2016;18(1):228-238. PMID: 26559435 * Corresponding author

- 50. Bei D and <u>An G</u>*. Pharmacokinetics and tissue distribution of 5,7-dimethoxyflavone in mice following single dose oral administration. *Journal of Pharmaceutical and Biomedical Analysis*. 2016;119:65-70. PMID: 26657177 * Corresponding author
- 51. Ma B, Qi H, Li J, Xu H, Chi B, Zhu J, Yu L, <u>An G</u>, Zhang Q. Triptolide disrupts fatty acids and peroxisome proliferator-activated receptor (PPAR) levels in male mice testes followed by testicular injury: A GC-MS based metabolomics study. *Toxicology*. 2015;336:84-95. PMID: 26219505
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- *53.* Ziegler D, Duan R, <u>An G</u>, Thomas JW, and Nothaft W. A Randomized Double-blind, Placeboand Active-Controlled Study of T-Type Calcium Channel Blocker ABT-639 in Patients with Diabetic Peripheral Neuropathic Pain. *Pain.* **2015**; 156(10): 2013-20. PMID: 26067585
- **54.** Cope J, Bushwitz J, <u>An G</u>, Antigua A, Patel A, and Zumberg M. Reply: Clinical experience with fondaparinux in critically ill patients with moderate to severe renal impairment and renal failure requiring renal replacement therapy. *Annals of Pharmacotherapy* **2015**;49(5):614-615. PMID: 25870447
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- 56. <u>An G*</u>, Liu W, and Dutta S. Small Molecule Compounds Exhibiting Target Mediated Drug Disposition (TMDD) a Case Example of ABT-384. *Journal of Clinical Pharmacology* 2015;55(10):1079-85. PMID: 25931139 * Corresponding author
- **57.** Cope J, Bushwitz J, <u>An G</u>, Antigua A, Patel A, and Zumberg M. Clinical experience with fondaparinux in critically ill patients with moderate to severe renal impairment and renal failure requiring renal replacement therapy. *Annals of Pharmacotherapy* **2015**;49(3):270-7. PMID: 25515864
- 58. <u>An G*</u>, Liu W, Duan R, Nothaft W, Awni W, and Dutta S. Population Pharmacokinetics and Exposure-Uric Acid Analyses after Single and Multiple Doses of ABT-639, a Calcium Channel Blocker, in Healthy Volunteers. *The AAPS Journal* 2015;17(2):481-92. PMID: 25676842 * Corresponding author
- 59. Fleisher B, Uum J, Shao J, and <u>An G*</u>. Ingredients in Fruit Juice Interact with Dasatinib through Inhibition of BCRP: A New Mechanism of Beverage-Drug Interaction. *Journal of Pharmaceutical Sciences* 2015;104(1):266-75. PMID: 25418056 *Corresponding author.
- 60. Bei D and <u>An G*</u>. Quantification of 5,7-Dimethoxyflavone in Mouse Plasma using Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) and its Application to a Pharmacokinetic Study. *Journal of Chromatography B* 2015; 978-979:11-7. PMID: 25531865
 * Corresponding author
- 61. Egelund EF, Isaza R, Brock AP, Alsultan A, <u>An G</u>, and Peloquin CA. Population Pharmacokinetics of Rifampin in the Treatment of Mycobacterium Tuberculosis in Elephants. *Journal of Veterinary Pharmacology and Therapeutics* **2015**;38(2):137-43. PMID: 25236765

- 62. Shao J, Markowitz JS, Bei D, and <u>An G*</u>. Enzyme- and Transporter-Mediated Drug Interactions with Small Molecule Tyrosine Kinase Inhibitors. *Journal of Pharmaceutical Sciences* 2014;103(12):3810-33. PMID: 25308414 * Corresponding author.
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- 64. <u>An G</u>, Wang X, and Morris ME. Dietary Flavonoids are Inhibitors of Human Organic Anion Transporter 1 (OAT1). *Drug Metabolism and Disposition* **2014**;42(9):1357-66. PMID: 25002746
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- 68. <u>An G</u> and Morris ME. A physiologically based pharmacokinetic model of mitoxantrone in mice and scale-up to humans: a semi-mechanistic model incorporating DNA and protein binding. *The AAPS Journal* **2012**; *14*(2):352-64. PMID: 22451016
- 69. Tsiklauri L, <u>An G</u>, Alaniya M, Kemertelidze E, Morris ME. Optimal Parameters of HPLC for Simultaneous Determination Robinin and Kaempferol. *Pharmaceutical Chemistry Journal* 2012,46(1):49-52.
- 70. <u>An G</u> and Morris ME. The sulfated conjugate of biochanin A is a substrate of breast cancer resistant protein (ABCG2). *Biopharmaceutics & Drug Disposition* 2011; 32(8):446-457. PMID: 21910126
- 71. <u>An G</u>, Wu F, and Morris ME. 5,7-Dimethoxyflavone and multiple flavonoids in combination alter the ABCG2-mediated tissue distribution of mitoxantrone in mice. *Pharmaceutical Research* 2011;28(5):1090-9. PMID: 21279423
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- 73. Tsiklauri L, <u>An G</u>, Ruszaj DM, Alaniya M, Kemertelidze E, Morris ME. Simultaneous determination of the flavonoids robinin and kaempferol in human breast cancer cells by liquid chromatography-tandem mass spectrometry. *Journal of Pharmaceutical and Biomedical Analysis.* 2011,55(1):109-13. PMID: 21232900

- 74. <u>An G</u> and Morris ME. Effects of single and multiple flavonoids on BCRP-mediated accumulation, cytotoxicity and transport of mitoxantrone in vitro. *Pharmaceutical Research* 2010;27(7): 1296-308. PMID: 20369276
- 75. <u>An G</u>, Ruszaj DM, and Morris ME. Interference of a sulfate conjugate in quantitative liquid chromatography/tandem mass spectrometry through in-source dissociation. *Rapid Communications in Mass Spectrometry* **2010**; 24:1817-1819. PMID: 20499328
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- 77. <u>An G</u> and Morris ME. HPLC analysis of mitoxantrone in mouse plasma and tissues: Application in a pharmacokinetic study. *J Pharm Biomed Anal* **2010**; *51(3)*: 750-3. PMID: 19850431
- Moon YJ, Shin BS, <u>An G</u> and Morris ME. Biochanin A inhibits breast cancer tumor growth in a murine xenograft model. *Pharmaceutical Research* 2008; 25(9): 2158-63. PMID: 18454305
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- 80. Yu Z, Zhou P, Wang X, Xu D, Chen B, Zhang W, <u>An G</u> and Fang J. Limited sampling strategy for the estimation of mycophenolic acid area under the plasma concentration-time curve in adult Chinese renal recipients. *Chinese Journal of Clinical Pharmacology* 2006;22(6): 243-247.
- 81. Yu Z, Chen B, Zhang W, <u>An G</u>, Fang J, and Cai WM. Pharmacokinetics of Pazufloxacin Mesilate in Chinese Healthy Volunteers. *Chinese Pharmaceutical Journal* 2006; 41(15): 1168-1171.
- 82. Di Q, Zhu B, <u>An G</u>, and Cai WM. The application status and future trend of parenteral nutrition preparation. *China Pharmacy* 2005; 16(11): 862-863
- 83. <u>An G</u>, Ji MC, Geng XF, and Cheng NN. The cost-effective analysis of different antihyperglycemic therapies in patients with type 2 diabetes mellitus. *Chinese Journal of Hospital Pharmacy J* 2004; 24(7):423-424.
- 84. <u>An G</u>, Geng XF, and Ji MC. Interactions of antihyperglycemic agents and drugs, *Chinese Journal of Clinical Pharmacology* **2003**; 19(1): 67-70.
- 85. <u>An G</u>, Geng XF, and Ji MC. Prescribing patterns and therapeutic implications in a cohort of 200 outpatients with type 2 diabetes and hypertension. *Chinese Journal of Pharmacoepidemiology* 2003; 12(2): 80-82.
- 86. Ji MC, Geng XF, and <u>An G</u>. The rational drug use analysis in insomniac patients in comprehensive hospital. *Chinese Academic Medical Magazine of Organisms* **2002**; 3:38-41.
- 87. <u>An G</u>, Geng XF, and Ji MC. The application of evidence-based medicine in the drug therapy of type 2 Diabetes Mellitus. *Chinese Academic Medical Magazine of Organisms* **2002**; *3*: 57-59.

Poster Abstracts

- 1. Rezaei L, Reeder JA, Strouse C, Sieg A, Farooq U, Donovan MD, <u>An G</u>. Methotraxate population pharmacokinetics in patients with primary CNS lymphoma: a single institution retrospective study. **ASCPT 2023** [abstract submitted]
- 2. Bach T, <u>An G</u>. Population pharmacokinetic model of agalsidase-migalastat HCl interaction: a novel mechanistic model of drug-drug interaction between a therapeutic protein and a small molecule. **ACOP**, Aurora, Colorado, Oct 30 Nov 2, **2022**
- Rolsma S, Sokolow A, Sokolow K, Patel P, Jimenez N, Fissell W, Landersdorfer C, Kirkpatrick C, Nation R, Gu K, <u>An G</u>, Teresi M, Winokur P, Thompson M, Creech B. Are We Dosing Correctly? Population Pharmacokinetic Modeling of Cefepime, Piperacillin-Tazobactam, and Meropenem in Individuals with Cystic Fibrosis. **IDWeek**, Washington, DC. Oct 19 23, 2022
- Reeder J, O'Sullivan CT, Xu M, Wu N, <u>An G</u>. Population Pharmacokinetic Modeling to Identify Appropriate Ampicillin-Sulbactam Redosing Regimen for Surgical Prophylaxis. ACCP, N Bethesda, Sep 25-27, 2022
- 5. Wu N, Katz D, <u>An G</u>. A Target-Mediated Drug Disposition Model to Explain Nonlinear Pharmacokinetics of the 11β-Hydroxysteroid Dehydrogenase Type 1 Inhibitor SPI-62 in Healthy Adults. **ACCP**, N Bethesda, Sep 25-27, **2022**
- Li P, Xu M, Yuan X, Wu N, <u>An G</u>. Development and validation of a simple, fast, and robust LC/MS/MS method for the quantification of albendazole, albendazole metabolites and praziquantel in human plasma. Pharmacological and Pharmaceutical Sciences Research Retreat, Iowa City, Iowa. August 2022
- Reeder J, Abdallah I, Bach T, Xu Y, Nalbant D, O'Sullivan C, <u>An G</u>. Development and Validation of a Simple and Sensitive LC-MS/MS Method for the Quantification of Cefazolin in Human Plasma and Its Application to a Clinical Pharmacokinetic Study. AAPS, Oct 17- 20, Philadelphia, PA, 2021
- Bach T, Galbiati S, Kennedy J, Deye G, Nomicos E, Codd EE, Garcia HH, Horton J, Gilman RH, Gonzalez AE, Winokur P, <u>An G.</u> Pharmacokinetics, Safety, and Tolerability of Oxfendazole in Healthy Adults in an Open Label Phase 1 Multiple Ascending Dose and Food Effect Study. ASCPT, Mar 2021
- 9. Wu N, <u>An G</u>. Incorporating pharmacological target-mediated drug disposition (TMDD) in a whole-body physiologically based pharmacokinetic (PBPK) model of linagliptin in rat and scale up to human. **ACOP**, November 9-13, **2020** [*this work was selected in ACoP11 Trainee Communication Challenge to give dynamic 5-minute presentation*]
- Wu N, Veng-Pedersen P, Widness JA. <u>An G.</u> Target-mediated disposition pharmacokinetics (TMDD) model of recombinant human erythropoietin (rHuEpo) in patients undergoing hematopoietic transplantation. AAPS, Oct 26- Nov 5, 2020 [*this work was selected to give 15 min rapid fire oral presentation*]
- Bach T, Abdallah I, Nalbant D, <u>An G</u>. Aspects of Matrix and Analyte Effects in Clinical Pharmacokinetic Sample Analyses using LC-ESI/MS/MS – Two Case Examples. AAPS, Oct 26- Nov 5, 2020

- 12. Lee KSS, Yang J, <u>An G</u>, Hammock BD. Slow, Tight-Binding sEH Inhibitors Exhibit Target-Mediated Drug Disposition. Winter Eicosanoid Conference, Oct 15, 2020.
- 13. Wu N, <u>An G</u>. Incorporating pharmacological target-mediated drug disposition (TMDD) in a whole-body physiologically based pharmacokinetic (PBPK) model of linagliptin in rat and scale up to human. Pharmacological and Pharmaceutical Sciences Research Retreat, Iowa City, Iowa. Aug 21, 2020 [short talk 8 min oral presentation]
- Bach T, <u>An G</u>. Translation of Oxfendazole from Veterinary Medicine to Human Antiparasitic Treatment. Pharmacological and Pharmaceutical Sciences Research Retreat, Iowa City, Iowa. Aug 21, 2020 [short talk - 8 min oral presentation]
- 15. Wu N, Hammock BD, Lee KSS, <u>An G</u>. Simultaneous target-mediated disposition population pharmacokinetics (TMDD) model of two competitive small molecules, TPPU and TCPU binding with more than one targets. **ASCPT**, Mar **2020** [poster abstract was published. Conference canceled due to coronavirus]
- 16. Sieg AG, Strouse C, Mott SL, Reeder J, Sutamtewagul G, Link BK, Syrbu S, <u>An G</u>, Farooq U. Methotrexate and Area Under the Curve Exposure in Patients Receiving MT-R for Primary CNS Lymphoma: A Single Institution Retrospective Study. ASH, Orlando, FL, Dec 7-10, 2019
- Bach T, Winokur P, <u>An G</u>. Comparing the performance of first-order conditional estimation (FOCE) and different expectation-maximization (EM) methods in handling complex nonlinear parent-metabolite pharmacokinetic model. AAPS, San Antonio, TX, Nov 3-7, 2019
- Bhatt-Mehta V, Schumacher RE, An G, Zhu H. Methadone and Metabolite Concentration Correlation in Maternal and Cord Serum and Neonatal Abstinence Syndrome Outcomes. AAPS, San Antonio, TX, Nov 3-7, 2019
- 19. Widness JA, Mock DM, Kiosseva SV, Franco RS, Nalbant D, Schmidt RL, <u>An G</u>, Cress GA, Strauss RG, Cancelas JA. Induction of Anti-Biotin Labeled Red Blood Antibodies Shortens Post-Transfusion Red Cell Survival. **AABB**, San Antonio, TX, Nov **2019**
- Bach T, Murry DJ, Winokur P, <u>An G</u>. Population Pharmacokinetic Model of Oxfendazole and Metabolites in Healthy Adults Following Single Ascending Doses. ACOP, Orlando, Oct 20-23, 2019
- Singla SK, <u>An G</u>, Donovan M, Ponto L. Pharmacodynamic Modeling of the Relationship between THC Concentrations and Corresponding Changes in the Heart Rate. ACCP, Chicago, Sep 14-17, 2019
- 22. Alghamdi W, Al-Shaer M, <u>An G</u>, Alsultan A, Kipiani M, Kempker RR, Cegielski P, Peloquin CA. Population Pharmacokinetics of Linezolid in TB Patients:Dosing Regimens Simulation and Target Attainment Analysis International Workshop on Clinical Pharmacology of Tuberculosis Drugs. London, United Kingdom. Sep 10, 2019
- 23. Alshaer M, Alghamdi W, Alsultan A, <u>An G</u>, Peloquin C. Ethionamide population pharmacokinetics model and monte carlo simulation in patients with multidrug-resistant tuberculosis. International Workshop on Clinical Pharmacology of Tuberculosis Drugs. London, United Kingdom. Sep 10, 2019

- 24. Bach T, Jiang Y, Zhang X, <u>An G</u>. General Pharmacokinetic Features of Small Molecule Compounds Exhibiting Target-Mediated Drug Disposition (TMDD) – a Simulation-Based Study. **AAPS**, Washington DC, Nov 04-07, **2018**
- 25. Alghamdi W, Alshaer M, Sultan A, <u>An G</u>, Peloquin C. Pharmacokinetic-Pharmacodynamic Target Attainment Analysis of Cycloserine in TB Patients. International Workshop on Clinical Pharmacology of Tuberculosis Drugs. The Hague, The Netherlands. Oct 23, 2018
- 26. Alshaer M, Alghamdi W, Sultan A, <u>An G</u>, Peloquin C. Fluoroquinolones in the treatment of multidrug-resistant tuberculosis: Experience from three US TB treatment centers. International Workshop on Clinical Pharmacology of Tuberculosis Drugs. The Hague, The Netherlands. Oct 23, 2018
- 27. Carroll PD, Widness JA, Nalbant D, Gingerich EL, <u>An G</u>, Cress GA, Veng-Pedersen P. Availability of neonatal umbilical arterial catheter results in greater phlebotomy loss. **Pediatric** Academic Societies (PAS), San Francisco. May 5 8, 2018
- 28. Suliman S, <u>An G</u>. Model-Based Meta-Analysis to Compare Primary Efficacy Endpoint and Efficacy Time Course for Opioids Used for Treatment of Osteoarthritis Pain. Health Sciences Research Week, Iowa City, April 17-18, 2018
- 29. D'Cunha R, Widness JA, Yan X, Schmidt R, Veng-Pedersen P, <u>An G</u>. An integrated mechanism-based population pharmacokinetics model of erythropoietin in adults and premature neonates following multiple intravenous doses. **ASCPT**, Orlando, Mar 21-24, **2018**.
- Bach T, Bae S, D'Cunha R, Winokur P, <u>An G</u>. The development of a liquid chromatographytandem mass spectrometry method for the quantification of oxfendazole in human plasma. ASCPT, Orlando, Mar 21-24, 2018.
- Suliman S, <u>An G</u>. Model-Based Meta-Analysis to Compare Primary Efficacy Endpoint and Efficacy Time Course for Opioids Used for Treatment of Osteoarthritis Pain. AAPS, San Diego, Nov 12-15, 2017
- D'Cunha R, Bae S, Murry, DJ, and <u>An G</u>. Nilotinib Alters Efflux Transporter-Mediated Pharmacokinetics and Tissue Distribution of Afatinib in Mice. AAPS, San Diego, Nov 12-15, 2017
- 33. D'Cunha R, and <u>An G</u>. A Whole-Body Physiologically Based Pharmacokinetic Model of Afatinib in Mice and Scale-Up to Humans. ACOP, Fort Lauderdale, Oct 15-18, 2017.
- 34. Alsultan A, Neely M, Alghamdi WA, Alshaer M, Heysell S, Kempker RR, Mpagama SG, Kipiani M, Chongolo A, Houpt ER, <u>An G</u>, Peloquin C. Population pharmacokinetics of cycloserine. ACOP, Fort Lauderdale, Oct 15-18, 2017
- 35. Bae S, D'Cunha R, and <u>An G</u>. Effect of 5,7-Dimethoxyflavone on Sorafenib Pharmacokinetics in Mice. ACCP, San Diego, Sep17 19, 2017
- 36. Carroll PD, Widness JA, Nalbant D, Gingerich EL, <u>An G</u>, Cress GA, Veng-Pedersen P. Does Umbilical Arterial Catheter Use Result In Greater Phlebotomy Loss? Pediatric Academic Societies (PAS), San Francisco. May 06 - 09, 2017
- 37. Jiang Y, Milavetz G, James MO, Stacpoole PW, and <u>An G</u>. A Semi-Mechanistic Pharmacokinetic Enzyme-Turnover Model for Dichloroacetic Acid (DCA) Auto-Inhibition in Rats. ACOP, Oct 22-26, 2016

- 38. D'Cunha R, Bae S, and <u>An G</u>. TKI Combination Therapy: Strategy to Enhance Dasatinib Uptake by Inhibiting Pgp- and BCRP- Mediated Efflux. **PGSRM**, Kansas City. May **2016**.
- 39. Bae S, D'Cunha R, and <u>An G</u>. BCRP-mediated Interaction between Fruit Juice Ingredients and Pazopanib. Health Sciences Research Week, Iowa City, April 2016
- 40. Bae S, D'Cunha R, and <u>An G</u>. Exploring the Synergy of TKIs Combination Therapy A Pilot Study of Transporter-mediated Interaction between Dasatinib and Other TKIs in Vitro. ICRU, Iowa City, Nov 18, 2015.
- 41. Awasthi R, <u>An G</u>, Donovan M, and Ponto L. An Effect-Compartment Modeling Approach to Relate the Plasma Concentrations of Delta-9-Tetrahydrocannabinol (THC) and Active Metabolite to the Observed Psychoactive Effects. **AAPS**, Orlando, Oct 25-29, **2015**
- 42. Fleisher B, Uum J, Shao J, and <u>An G</u>. Grapefruit Juice Ingredients Interact with Dasatinib through Inhibition of Breast Cancer Resistance Protein (BCRP): A New Type of Beverage-Drug Interaction. ASCPT, March 2015
- 43. Uum J, Fleisher B, Shao J, and <u>An G</u>. Orange Juice and Apple Juice Ingredients Inhibit Dasatinib Efflux via P-Glycoprotein and Breast Cancer Resistance Protein: A New Type of Beverage-Drug Interaction. **ASCPT**, March 2015
- 44. Bei D and <u>An G</u>. Quantification of 5,7-Dimethoxyflavone in Mouse Plasma using Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) and its Application to a Pharmacokinetic Study. AAPS, San Diego, Nov 1-5, 2014
- 45. Alsultan A, Derby R, <u>An G</u>, and Peloquin C. Bayesian Estimation of Levofloxacin Pharmacokinetics in Patients with Tuberculosis. **ICAAC**, 2014.
- 46. Tsiklauri L.K., <u>An G</u>, Tsagareishvili G.V., Alaniya M, Kemertelidze E, Morris M.E. Investigation of Functional Role of Membrane Transporters in Oral Bioavailability of Robinin. III International Scientifi c and Practical Conference "Topical issues in medicine", West Kazakhstan Marat Ospanov State Medical University. Aktobe, Kazakhstan, April 17-18, 2014
- 47. Gottipati G, Lin C, Venitz J, Lesko L, and <u>An G</u>. Model-based Meta-analysis (MBMA) of Adverse Events (AE) and Dropouts (DO) for Drugs Evaluated for the Treatment of Fibromyalgia pain (FMP), **ASCPT**, Atlanta, Mar 18-21, **2014**.
- 48. Gottipati G, Trame, MN, Lin C, Venitz J, Lesko L, and <u>An G</u>. Model-based Meta-analysis (MBMA) of Efficacy at End-of-Trial and Efficacy-Time Course for Drugs Evaluated for the Treatment of Fibromyalgia pain (FMP). ASCPT, Atlanta, Mar 18-21, 2014. [Gottipati received Presidential Trainee Award for this poster].
- 49. Deng J, Lesko L, and <u>An G</u>. A Physiologically Based Pharmacokinetic Model of Gefitinib Disposition: from Rat to Man. **ASCPT**, Atlanta, Mar 18-21, **2014**.
- Deng J, Lesko L, and <u>An G</u>. Prediction of Gefitinib Human Pharmacokinetics From Animal Data - Comparative Assessment of Different Allometric Scaling Approaches. ASCPT, Atlanta, Mar 18-21, 2014.
- 51. Shao J*, Deng J*, Bei D, and <u>An G</u>. Nilotinib is a dual P-gp and BCRP inhibitor and inhibits P-gp-mediated dasatinib efflux and BCRP-mediated gefitinib efflux. (*contributed equally) UF Health Cancer Center Research Poster Day. Gainesville, Mar 11, 2014

- 52. Shao J, Deng J, Bei D, and <u>An G</u>. Exploring the Synergy of TKIs Combination Therapy A Pilot Study of P-gp-mediated Interaction between Dasatinib and Imatinib in LLC PK1 Cells. UF COP Research Showcase. Gainesville, Feb 20, 2014.
- 53. Cope J, Antigua A, Bushwitz J, <u>An G</u>, Patel A, and Zumberg M. Fondaparinux Use in Severe Renal Impairment and Renal Failure Requiring Renal Replacement Therapy. Society of Critical Care Medicine Annual Congress. San Francisco, January 9-13, 2014.
- 54. Deng J, Lesko L, and <u>An G</u>. A Physiologically Based Pharmacokinetic Model of Gefitinib Disposition: from Rat to Man. Graduate Research Day, Gainesville, Oct 31st, 2013.
- 55. Deng J, Jiang XL, Schmidt S, Lesko L, and <u>An G</u>. Physiologically-Based Pharmacokinetic Model for the CYP3A-mediated Inhibition of Midazolam Inhibition by Itraconazole. 9th Retrometabolism Based Drug Design and Targeting Conference, Orlando, May 12-15, 2013.
- 56. <u>An G*</u>, Wang X*, and Morris ME. Dietary Flavonoid Fisetin is a Substrate and Inhibitor of Human Organic Anion Transporter 1 (OAT1). (* contributed equally) AAPS, Chicago, Oct 14-18, 2012.
- 57. <u>An G</u>, Liu W, Awni W, and Dutta S. Model-Based Meta-Analyses of Efficacy and Safety of COX-2 Inhibitors in Patients with Osteoarthritis Pain. AAPS, Chicago, Oct 14-18, 2012.
- 58. Liu W, <u>An G</u>, Dutta S, Nothaft W, Duan R, Jain R, Awni W. ABT-652 Phase 2b Dose Selection Based on Exposure-Response Analyses of Efficacy, Safety (Heart Rate, Adverse Effects) and Dropout from Proof of Concept Study in Subjects with Osteoarthritic Pain. Abbott Day of Science and Technology, Chicago, Nov 14-15, 2011.
- <u>An G</u> and Morris ME. A physiologically based pharmacokinetic model of mitoxantrone in mice: a mechanism-based model incorporating DNA and protein binding. ACoP, San Diego, April 3-6, 2011
- 60. <u>An G</u> and Morris ME. The bioflavonoid kaempferol is an Abcg2 substrate and inhibits Abcg2mediated quercetin efflux. **AAPS**, New Orleans, Nov 14-18, **2010**
- 61. <u>An G</u> and Morris ME. The sulfated conjugate of biochanin A is a substrate of breast cancer resistant protein (ABCG2). **AAPS**, New Orleans, Nov 14-18, **2010**
- 62. <u>An G</u> and Morris ME. A PBPK model of mitoxantrone in mice: a mechanism-based model incorporating macromolecule binding. **Pharmacology Day**, University at Buffalo, July 27, **2010**
- <u>An G</u> and Morris ME. Determination of mitoxantrone in mouse plasma and tissues by an improved HPLC method and its application in a pharmacokinetic study. AAPS, Los Angeles, Nov 7-11, 2009
- 64. <u>An G</u> and Morris ME. Transport and efflux of quercetin and biochanin A in MDCK cell monolayers- role of efflux transporters. **AAPS**, Los Angeles, Nov 7-11, **2009**
- 65. Liu JH, <u>An G</u> and Morris ME. The effect of flavonoids on transport of mitoxantrone in ABCG2 transfected MDCK cells. Sigma Xi, University at Buffalo, April, 2009
- 66. <u>An G</u> and Morris ME. Inhibition of the BCRP-mediated transport of mitoxantrone by the flavonoids Biochanin A and Kaempferide. **AAPS**, Atlanta, Nov7-11, **2008**.
- 67. <u>An G</u> and Morris ME. Effect of multiple flavonoid combinations on Breast Cancer Resistance Protein (ABCG2) mediated transport. **AAPS**, Atlanta, Nov 7-11, **2008**

INVITED PRESENTATIONS

- 1. <u>An G</u>. Model-Informed Drug Development Case Examples of Small-Molecule Compounds Exhibiting Target-Mediated Drug Disposition. Oct 6-7, **2022, Pharmaceutical and BioScience Society (PBSS)**
- 2. <u>An G.</u> The Utility of Pharmacometric Models in Clinical Pharmacology Research in Infantsa Case Example of Erythropoietin. Sep 17-21, **2022.** Shanghai Pujiang Pharmaceutical Care Forum. Shanghai, China
- 3. <u>An G.</u> Model-Informed Drug Development Case Examples of Small-Molecule Compounds Exhibiting Target-Mediated Drug Disposition. April 29, **2022.** Human Toxicology Seminar. The Environmental Health Sciences Research Center. Iowa City, Iowa
- 4. <u>An G.</u> Concept of Pharmacologic Target-Mediated Drug Disposition (TMDD) in Small-Molecule Compounds. Invited talk. Jan 24- Jan 26, 2022. 3rd Alpine Winter Conference on Medicinal and Synthetic Chemistry.
- 5. <u>An G.</u> Concept of Pharmacologic Target-Mediated Drug Disposition (TMDD) in Large-Molecule and Small-Molecule Compounds. Invited talk. April 19, 2021. University of Michigan.
- 6. <u>An G.</u> Concept of Pharmacologic Target-Mediated Drug Disposition (TMDD) in Large-Molecule and Small-Molecule Compounds. American College of Clinical Pharmacology (ACCP) webinar. May 20, 2020. [hot topic. 180 people, mainly from various pharmaceutical companies, registered this webinar]
- 7. <u>An G.</u> Translation of Oxfendazole from Veterinary Medicine to Human Antiparasitic Treatment. Executive Leadership Board Meeting. Iowa City, Iowa. Oct 18, **2019**.
- <u>An G</u>. Pharmacometric Modeling in Pharmaceutical Research, Drug Development, and Clinical Care. College of Pharmacy, University of Iowa. Iowa City, Iowa. Sep 20, 2019. [this was a tenure application seminar]
- **9.** <u>An G</u>. Pharmacokinetics and Safety Evaluation of Oxfendazole in Healthy Volunteers – Results from Two Phase I Studies. NIH Vaccine and Treatment Evaluation Unit (VTEU) annual meeting. June 7, **2019**
- 10. <u>An G.</u> A novel physiology-based mathematical model for RBC lifespan prediction and its potential clinical application in pediatric diabetes. College of Pharmacy, Subtract of Clinical Pharmaceutical Sciences (CPS) seminar. Iowa City, Iowa. Oct 18, 2016
- 11. Veng-Pedersen P, Widness J, and <u>An G</u>. Optimized Epo Treatment of Neonatal Anemia. NIH Program Project Group (PPG) annual meeting. Iowa City, Iowa. April 13, 2015.
- 12. <u>An G</u>. Exposure-Response Analysis of Two Drug Candidates in Human Examples of Leveraging Quantitative Clinical Pharmacology to Impact Trial Design and Decision Making. University of Florida. Orlando, Florida. August 24, 2012
- 13. <u>An G</u>. Effects of Flavonoids on the BCRP-Mediated Pharmacokinetics and Pharmacodynamics of Mitoxantrone. Ohio State University. Columbus, Ohio. Jan 26, 2012

TEACHING

The University of Iowa (Sep 2014 – Present)

Professional Program:

PHAR8148 Pharmacokinetics and Dose Optimization (2 credits | total 30 lectures | I am the sole instructor | size of the class: ~100 PharmD students) Spring 2020; Spring 2021; Spring 2022

PHAR8146 Foundations of Pharmaceutical Sciences III (2 credits | total 30 lectures | I am the sole instructor | size of the class: ~110 PharmD students) Spring 2016, Spring 2017, Spring 2018, Spring 2019

Graduate Program:

PHAR6700 Advanced Pharmacokinetics and Pharmacodynamics (3 credits | total 45 lectures | I am the sole instructor | size of the class: ~16 to 18 graduate students) Spring 2016; Spring 2018; Fall 2019; Fall 2021

PHAR5800 Concepts in Preclinical Drug Development (1 credit | total 15 lectures | I am the sole instructor | size of the class: ~8 graduate students) Fall 2022

Undergraduate Program:

PHAR4146 Drug Disposition and Pharmacokinetics (2 credit // total 30 lectures / all lectures were given via Panopto recording / 6 contact hours / I am the sole instructor / size of the class: ~3 to 5 undergraduate students) Spring 2017, Spring 2018, Spring 2019, Fall 2019; Spring 2021; Fall 2021

The University of Florida (Dec 2012 – Aug 2014)

PHA5128 Dose Optimization II (2 credits | total 30 lectures | I taught 7 lectures) Spring 2013, Spring 2014

SUNY, University at Buffalo (Spring 2009)

PHM527 I taught one lecture on "Drug interactions with herbal supplements" Spring 2009

Ruijin Hospital, Shanghai, China (Aug 2013 – May 2015)

Rational Drug Use I taught two lectures on "Rational use of Antibiotics" Spring 2004, Spring 2005

SERVICES

External Services

ACCP Honors & Awa	rds Committee Sep 20	22 – present		
PhRMA Foundation P	anel Reviewer Oct 20	22 Drug Deli	very Review Committee	
NSF Panel Reviewer	March 2022 [SBIR/STTR Phase I: Drug Discovery panel]			
NSF Panel Reviewer	November 2021 [SBIR/STTR Phase I: Drug Discovery Methods and Platforms panel]			
NSF Panel Reviewer	August 2021 [SBIR/S Molecules panel]	TTR Phase I: I	Pharm Tech - Therapeutic	
NIH Panel Reviewer	July 2021 [Study Section: <i>Xenobiotic and Nutrient Disposition and Action (XNDA)</i>]			
External Thesis Review	ver May 2021 [PhD can U at Buffalo. Thesis			
NSF Panel Reviewer	May 2021 (Ad Hoc revi Pharm Tech - Therapeut		· -	
NSF Panel Reviewer	February 2021 [SBIR/S Molecules panel]	STTR Phase I:	Pharm Tech - Therapeutic	
NSF Panel Reviewer	December 2020 [SBIR/ Molecules panel]	STTR Phase I:	Pharm Tech - Therapeutic	
NIH/NIAID consultant (2020 - present) – involved in sNDA submission of amoxicillin and amoxicillin/clavulanate for their labeling addition in inhalational anthrax				
Nomination subcommittee member of JPharmSci TM 2021 Ebert Prize paper Sep 2020; Sep 2021				
NIH Panel Reviewer	June 2019 [Study Section Action (XNDA)]	: Xenobiotic and	d Nutrient Disposition and	
NIH Panel Reviewer		: Xenobiotic and	l Nutrient Disposition and	
NIH Panel Reviewer		: Xenobiotic and	d Nutrient Disposition and	
AAPS PPDM SPOD Committee member (Nov 2013 – Oct 2015)				

> AAPS PPDM EPDC Committee member (Nov 2015 – Oct 2016)

External Thesis Reviewer June 2018 [PhD candidate Xiaowen Guan from SUNY, U at Buffalo. Thesis Advisor: Dr. Marilyn E. Morris]

Editor or Editorial Board Member:

- Journal of Pharmaceutical Sciences -Jan 2022 -present, Editor -2016-2021, Editorial Board Member
- *The AAPS Journal* (2020 present; editorial board member)
- Journal of Clinical Pharmacology (2014 present; editorial board member)
- Drugs in R&D (2013 present; editorial board member)

Journal Reviewer:

-Antimicrobial Agents and Chemotherapy	-Asian Biomedicine		
-Biopharmaceutics & Drug Disposition	-Drug Metabolism and Disposition		
-British Journal of Clinical Pharmacology	-Drug Metabolism Reviews		
-Cancer Chemotherapy and Pharmacology	-Drugs in R&D		
-Clinical Pharmacokinetics	-Drug Discovery Today		
-Clinical Pharmacology in Drug Development	-Journal of Chromatography B		
-Clinical Therapeutics	-Journal of Clinical Pharmacology		
Journal of Antimicrobial Chemotherapy	-Journal of Pharmaceutical Sciences		
-Molecular Pharmaceutics	-Pediatric Diabetes		
-The AAPS Journal	-TALANTA		
-The Journal of Pharmacology and	-The Journal of Pharmacokinetics and		
Experimental Therapeutics	Pharmacodynamics		
-Therapeutic Advances in Medical Oncology	-Xenobiotica		
-Pharmaceutical Research	- Journal of Radiation and Applied Sciences		
- Journal of Pharmaceutical and Biomedical	-CPT: Pharmacometrics and Systems		
Analysis	Pharmacology		
PLOS Neglected Tropical Diseases			

Internal Services

- Reviewers for the OVPR Early Career Scholars Program (Nov 2021)
- Committee member of the faculty search (the pharmaceutics position, 2021-2022)
- Committee member of Assistant Dean of DEI (2021)
- Committee member of assessment committee (Aug 2020 present)
- Committee member of the faculty search (the pharmacogenomics position, 2019-2020)
- Committee member of Graduate Education and Research Advisory Committee (GERC) (2018-2020)
- Committee member of lab safety (2015-2018)
- Committee member of the faculty search (the PK position, 2015-2016)

- > Committee chair of following graduate students:
 - Ronilda Raymond D'Cunha (PhD, graduated in Aug 2018)
 - Thanh Bach (PhD, Graduated in June 2021)
 - Joshua Reeder (PhD student, 2019-present)
 - Nan Wu (PhD student, 2019-present)
 - Min Xu (PhD student, 2021-present)
 - Xuanzhen Yuan (PhD student, 2021-present)
 - Peizhi Li, PharmD (Master student, 2022- present)
- Committee member of following graduate students:
 - Wisam Al Bakri
 - Rakesh Awasthi
 - Megan N Kelchen
 - Yu Jiang
 - Ana C. Ferreira
 - Zainab Bakri
 - Nattawut Leelakanok
 - Leyla Rezaei
 - Emily Liang
 - Yau Adamu

PROFESSIONAL AFFILIATIONS

- American Association of Pharmaceutical Sciences (AAPS), since 2006
- American Society for Clinical Pharmacology and Therapeutics (ASCPT), since 2010
- American Society of Pharmacometrics (ASOP), 2012
- International Society for the Study of Xenobiotics (ISSX), 2013
- > American College of Clinical Pharmacology (ACCP), since 2014
- American Society for Microbiology (ASM), since 2018
- American Society for Pharmacology and Experimental Therapeutics (ASPET), 2020