

Curriculum Vitae

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EDUCATION

<u>2009.08-2013.12</u>	Ph.D., Toxicology , The University of Georgia, Athens, GA Dissertation: Integrating experimental and physiologically based pharmacokinetic (PBPK) modeling approaches to evaluate neurotoxicity of the herbicide atrazine across the lifespan
<u>2004.09-2009.06</u>	B.Med., Preventive Medicine , Southern Medical University, Guangzhou, China

BOARD CERTIFICATIONS

<u>2017.11-present</u>	Diplomate of the American Board of Toxicology (DABT) (Recertified in December 2022)
<u>2019.03-present</u>	Certara Professional Certification, Population PK/PD Pharmacometrician (Level 1) using Phoenix NLME 8.0 and 8.1
<u>2019.08-present</u>	Certified in Public Health (CPH) by National Board of Public Health Examiners (NBPHE) (Recertified in May 2021)
<u>2022.11-present</u>	European Registered Toxicologist (ERT) through UK Register of Toxicologists (UKRT)

RESEARCH EXPERIENCE AND POSITIONS

2021.05-present: Associate Professor (tenure upon appointment), Center for Environmental and Human Toxicology, Department of Environmental and Global Health, College of Public Health and Health Professions, with joint appointments in the College of Veterinary Medicine (Department of Physiological Sciences) and College of Pharmacy (Department of Pharmaceutics), University of Florida, Gainesville, FL.

External Mentor: Michael Daniels, Department of Statistics, University of Florida

- Member, Center for Environmental and Human Toxicology (2021.05-present)
- Member, Center for Pharmacometrics and Systems Pharmacology (2021.05-present)
- Member, Food Systems Institute (2022.03-present)

2016.01-2021.05: Assistant Professor (01/2016-03/2021), and then Associate Professor with tenure (03/2021-05/2021) in Pharmacology and Toxicology, Institute of Computational Comparative Medicine, Department of Anatomy and Physiology, College of Veterinary Medicine, Kansas State University, Manhattan, KS

- Affiliated Faculty, Nanotechnology Innovation Center of Kansas State (NICKS), Kansas State University (2018.10-2021.05)
- Coordinator, Certara Academic Center of Excellence for Model-informed Drug Development (MIDD), Institute of Computational Comparative Medicine, Kansas State University (2018.01-2021.05)
- Principle Investigator and Regional Director, K-State Component, Food Animal Residue Avoidance Databank (FARAD) Consortium (2017.09-2021.05)
- Ancillary Faculty, Department of Statistics, College of Arts and Sciences, Kansas State University, Manhattan, KS (2016.08-2021.05)
- Graduate Faculty, Master of Public Health Program, Kansas State University (2016.07-2021.05)
- Short-term Visiting Scholar, Health Effects and Exposure Science, Pacific Northwest National Laboratory, Richland, WA; Host/mentor: Dr. Justin G. Teeguarden; Research project: Nanomaterial in vitro dosimetry prediction using the In vitro Sedimentation, Diffusion and Dosimetry (ISDD) model (2016.05)

2014.02-2016.01: Postdoctoral Fellow, Institute of Computational Comparative Medicine, Department of Anatomy and Physiology, College of Veterinary Medicine, Kansas State University, Manhattan, KS

Advisor: Dr. Jim E. Riviere, Co-advisors: Dr. Nancy A. Monteiro-Riviere and Dr. Ronette Gehring

Field of study: Computational Pharmacology, Toxicology, Food Safety and Risk Assessment

Major research projects: 1) PBPK modeling of nanomaterials in rodents, pigs, and humans; 2) PBPK modeling of drugs in food animals, companion animals, and humans

2009.08-2013.12: Graduate Research Assistant, Interdisciplinary Toxicology Program, Department of Physiology and Pharmacology, College of Veterinary Medicine, The University of Georgia, Athens, GA

Major Advisor: Dr. Nikolay M. Filipov; PBPK modeling mentor: Dr. Jeffrey W. Fisher

Dissertation Committee: Dr. Julie A. Coffield, Dr. Mary Alice Smith, Dr. Jia-Sheng Wang, Dr. Xiaoqin Ye

Research projects: Neurotoxicology, PBPK modeling, metabolomics, pharmacokinetics, and adverse outcome pathway (AOP) analyses of the pesticide atrazine

PUBLICATIONS (* indicates corresponding author)

Submitted Peer-Reviewed Manuscripts

(These manuscripts are under review or in revision or in press)

1. Zad N, Tell LA, Ramachandran RA, Xu X, Riviere JE, Baynes R, **Lin Z**, Maunsell F, Davis J, Jaber-Douraki M. (2023). Development of Machine Learning Algorithms to Estimate Maximum Residue Limits for Veterinary Medicines. *Food and Chemical Toxicology*, acceptable pending revision.
2. Chou WC, Chen Q, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE, **Lin Z***. (2023). An artificial intelligence-assisted physiologically-based pharmacokinetic model to predict nanoparticle delivery to tumors in mice. *Journal of Controlled Release*, acceptable pending revision.
3. Chen Q, Yuan L, Chou WC, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE, **Lin Z***. (2023). Meta-analysis of nanoparticle distribution in tumors and major organs in tumor-bearing mice. Under review.

Published Peer-Reviewed Manuscripts

93. Chou WC, **Lin Z***. (2023). Machine learning and artificial intelligence in physiologically based pharmacokinetic modeling. *Toxicological Sciences*, 191(1):1-14. [PMID: 36156156] [PMCID: PMC9887681] <https://doi.org/10.1093/toxsci/kfac101>
92. Schmidt S*, Vozmediano V, Cristofolletti R, Kim S, **Lin Z**, de Moraes N, Azeredo F, Cicali B, Leuenberger H, Brown JD, Jin JY, Musante CJ, Tannenbaum S, Wang Y. (2023). Requirements, Expectations, Challenges & Opportunities Associated with Training the Next Generation of Pharmacometricians. *CPT: Pharmacometrics & Systems Pharmacology*, in press. <https://doi.org/10.1002/psp4.12970>
91. Fritz SA, Ensley SM, Lawrence JR, Van Engen N, **Lin Z**, Kleinhenz MD, Wulf LW, Rice S, Gorden PJ, Peterson J, Coetzee JF. (2023). Plasma pharmacokinetics, milk residues, and toxicological evaluation of a single high dose of meloxicam administered at 30 mg/kg *per os* to lactating dairy cattle. *Veterinary Sciences*, 10(4):301. [PMID: 37104456] <https://doi.org/10.3390/vetsci10040301>
90. Yuan L, Chen Q, Riviere JE, **Lin Z***. (2023). Pharmacokinetics and tumor delivery of nanoparticles. *Journal of Drug Delivery Science and Technology*, 83, 104404. <https://doi.org/10.1016/j.jddst.2023.104404>
89. **Lin Z***, Aryal S*, Cheng YH, Gesquiere AJ*. (2022). In vitro to in vivo extrapolation of cellular and tissue dosimetry of nanomaterials via physiologically based pharmacokinetic modeling. *ACS Nano*, 16(12), 19722-19754. [PMID: 36520546] [PMCID: PMC9798869] <https://doi.org/10.1021/acsnano.2c07312>
88. Chou WC, Cheng YH, Riviere JE, Monteiro-Riviere NA, Kreyling WG, **Lin Z***. (2022). Development of a multi-route physiologically based pharmacokinetic (PBPK) model for nanomaterials: a comparison between a traditional versus a new route-specific approach using gold nanoparticles in rats. *Particle and Fibre Toxicology*, 19(1):47. [PMID: 35804418] [PMCID: PMC9264615] <https://doi.org/10.1186/s12989-022-00489-4> [Best Publication Award of the Year 2022 presented by Society of Toxicology (SOT) Nanoscience and Advanced Materials Specialty Section (NAMSS) in 2023]
87. **Lin Z***, Chou WC*, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE. (2022). Predicting Nanoparticle Delivery to Tumors Using Machine Learning and Artificial Intelligence Approaches. *International Journal of Nanomedicine*, 17:1365-1379. [PMID: 35360005] [PMCID: PMC8961007] (# equal contribution) <https://doi.org/10.2147/IJN.S344208>

86. Lin Z*, Chou WC. (2022). Machine learning and artificial intelligence in toxicological sciences. *Toxicological Sciences*, 189(1):7-19. [PMID: 35861448] [PMCID: PMC9609874] <https://doi.org/10.1093/toxsci/kfac075>
85. Chen Q, Riviere JE, Lin Z*. (2022). Toxicokinetics, Dose-Response and Risk Assessment of Nanomaterials: Methodology, Challenges and Future Perspectives. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, 14(6), e1808. [PMID: 36416026] [PMCID: PMC9699155] <https://doi.org/10.1002/wnan.1808>
84. Chou WC, Tell LA, Baynes RE, Davis JL, Maunsell FP, Riviere JE, Lin Z*. (2022). An interactive generic physiologically based pharmacokinetic (igPBPK) modelling platform to predict drug withdrawal intervals in cattle and swine. *Toxicological Sciences*, 188(2):180-197. [PMID: 35642931] <https://doi.org/10.1093/toxsci/kfac056>
83. Yuan L, Chou WC, Richards ED, Tell LA, Baynes RE, Davis JL, Riviere JE, Lin Z*. (2022). A web-based interactive physiologically based pharmacokinetic (iPBPK) model for meloxicam in broiler chickens and laying hens. *Food and Chemical Toxicology*, 168:113332. [PMID: 35940329] <https://doi.org/10.1016/j.fct.2022.113332>
82. Chen Q, Chou WC, Lin Z*. (2022). Integration of toxicogenomics and physiologically based pharmacokinetic modeling in human health risk assessment of perfluorooctane sulfonate. *Environmental Science & Technology*, 56(6):3623-3633. [PMID: 35194992] <https://doi.org/10.1021/acs.est.1c06479> [Best Postdoctoral Publication Award of the Year 2022 presented by Society of Toxicology in 2023]
81. Yuan L, Lin Z, Dutch RS, Richards ED, Clapham MO, Burmas N, Wetzlich SE, Tell LA*. (2022). Residue depletion profiles and withdrawal interval estimations of meloxicam in eggs and ovarian follicles following intravenous (Meloxicam Solution for Injection) and oral (Meloxidyl®) administration in domestic chickens (*Gallus domesticus*). *Regulatory Toxicology and Pharmacology*, 132, 105170. [PMID: 35460801] <https://doi.org/10.1016/j.yrtph.2022.105170>
80. Tao G, Chityala PK, Li L, Lin Z*, Ghose R*. (2022). Development of a physiologically based pharmacokinetic model to predict irinotecan disposition in mice during inflammation. *Chemico-Biological Interactions*, 360, 109946. [PMID: 35430260] <https://doi.org/10.1016/j.cbi.2022.109946>
79. Mercer MA, Davis JL*, Riviere JE, Baynes RE, Tell LA, Jaber-Douraki M, Maunsell FP, Lin Z. (2022). Mechanisms of Toxicity and Residue Considerations of Rodenticide Exposure in Food Animals: a FARAD Perspective. *Journal of the American Veterinary Medical Association*, 260(5):514-523. [PMID: 35092661] <https://doi.org/10.2460/javma.21.08.0364>
78. Xu N, Li M, Lin Z*, Ai X*. (2022). Comparative pharmacokinetics of sulfadiazine and its metabolite N4-acetyl sulfadiazine in grass carp (*Ctenopharyngodon idella*) at different temperatures after oral administration. *Pharmaceutics*, 14(4), 712. [PMID: 35456543] [PMCID: PMC9025148] <https://doi.org/10.3390/pharmaceutics14040712>
77. Kleinhenz MD, Weeder M, Montgomery S, Martin M, Curtis A, Magnin G, Lin Z, Griffin J, Coetzee JF. (2022). Short term feeding of industrial hemp with a high cannabidiolic acid (CBDA) content increases lying behavior and reduces biomarkers of stress and inflammation in calves. *Scientific Reports*, 12(1):3683. [PMID: 35256692] [PMCID: PMC8901777] <https://doi.org/10.1038/s41598-022-07795-z>
76. Richards ED, Dutch RS, Burmas NC, Davis JL, Lin Z, Clapham MO, Wetzlich SE, Tell LA*. (2022). Pharmacokinetic parameters and estimating extra-label tissue withdrawal intervals using three approaches and various matrices for domestic laying chickens following meloxicam administration. *Frontiers in Veterinary Science*, 9:826367. [PMID: 35310412] [PMCID: PMC8927936] <https://doi.org/10.3389/fvets.2022.826367>
75. Halleran JL, Papich MG, Li M, Lin Z, Davis J, Maunsell P, Riviere J, Baynes R, Foster DM*. (2022). Update on Withdrawal Intervals following Extralabel Use of Procaine Penicillin G in Cattle and

- Swine. *Journal of the American Veterinary Medical Association*, 260(1):50-55. [PMID: 34793323] <https://doi.org/10.2460/javma.21.05.0268>
74. Chou WC, Lin Z*. (2021). Evaluation of Health-Based Toxicity Values for Perfluorooctane Sulfonate (PFOS) by Considering Species-Specific Fetal and Neonatal Dosimetry Using a Gestational and Lactational Physiologically Based Pharmacokinetic (PBPK) Model in Rats and Humans. *Environmental Health Perspectives*, 129(3):37004. [PMID: 33730865] [PMCID: PMC7969127] <https://doi.org/10.1289/EHP7671> [Featured at [K-State Today](#) and [CVM Lifelines](#)] [Best Paper Award of the Year 2021, Society of Toxicology Biological Modeling Specialty Section; Best Paper Demonstrating an Application of Risk Assessment, Society of Toxicology Risk Assessment Specialty Section]
 73. Riad MH, Baynes RE, Tell LA, Davis JL, Maunsell FP, Riviere JE, Lin Z*. (2021). Development and application of an interactive physiologically based pharmacokinetic (iPBPK) model to predict oxytetracycline tissue distribution and withdrawal intervals in market-age sheep and goats. *Toxicological Sciences*, 183(2):253-268. [PMID: 34329480] <https://doi.org/10.1093/toxsci/kfab095>
 72. Martin M, Smith S, Kleinhenz M, Magnin G, Lin Z, Kuhn D, Montgomery S, Coetzee J*. (2021). Comparative pharmacokinetics and tissue concentrations of flunixin meglumine and meloxicam in tilapia (*Oreochromis spp.*). *Fishes*, 6(4), 68. <https://doi.org/10.3390/fishes6040068> [Listed as one of the Editor's Choice Articles]
 71. DeLong RK*, Swanson R, Niederwerder MC, Khanal P, Aryal S, Marasini R, Jaber-Douraki M, Shakeri H, Mazloom R, Schneider S, Ensley S, Clarke LL, Woode RA, Young S, Rayamajhi S, Miesner T, Higginbotham ML, Lin Z, Shrestha T, Ghosh K, Glaspell G, Mathew EN. (2021). Zn-based physiometacomposite nanoparticles: distribution, tolerance, imaging, and antiviral and anticancer activity. *Nanomedicine (Lond)*, 16(21):1857-1872. [PMID: 34282923] <https://doi.org/10.2217/nnm-2021-0179>
 70. Xu N, Cheng B, Li M, Lin Z, Ai X*. (2021). Withdrawal interval estimation of doxycycline in yellow catfish (*Pelteobagrus fulvidraco*) using an LC-MS/MS method based upon QuEChERS sampling preparation. *Foods*, 10(11):2554. [PMID: 34828835] [PMCID: PMC8625883] <https://doi.org/10.3390/foods10112554>
 69. Richards ED, Tell LA, Davis JL, Baynes RE, Lin Z, Maunsell FP, Riviere JE, Jaber-Douraki M, Martin KL, Davidson G*. (2021). Honey bee medicine for veterinarians and guidance for avoiding violative chemical residues in honey. *Journal of the American Veterinary Medical Association*, 259(8):860-873. [PMID: 34609191] <https://doi.org/10.2460/javma.259.8.860>
 68. Li M, Wang YS, Elwell-Cuddy T, Baynes RE, Tell LA, Davis JL, Maunsell FP, Riviere JE, Lin Z*. (2021). Physiological parameter values for physiologically based pharmacokinetic models in food-producing animals. Part III: Sheep and goat. *Journal of Veterinary Pharmacology and Therapeutics*, 44(4), 456-477. [PMID: 33350478] <https://doi.org/10.1111/jvp.12938> [Wiley Top Cited Article 2021-2022]
 67. Xu N, Li M, Ai X, Lin Z*. (2021). Determination of pharmacokinetic-pharmacodynamic parameters of doxycycline against *Edwardsiella ictaluri* in yellow catfish (*Pelteobagrus fulvidraco*). *Antibiotics*, 10(3), 329. [PMID: 33800996] [PMCID: PMC8004065] <https://doi.org/10.3390/antibiotics10030329>
 66. Wang YS, Li M, Tell LA, Baynes RE, Davis JL, Vickroy TW, Riviere JE, Lin Z*. (2021). Physiological parameter values for physiologically based pharmacokinetic models in food-producing animals. Part II: Chicken and turkey. *Journal of Veterinary Pharmacology and Therapeutics*, 44(4), 423-455. [PMID: 33289178] <https://doi.org/10.1111/jvp.12931> [Wiley Top Cited Article 2021-2022]
 65. Viscardi AV*, Reppert EJ, Kleinhenz MD, Wise P, Lin Z, Montgomery S, Daniell H, Curtis A, Martin M, Coetzee JF. (2021). Analgesic comparison of flunixin meglumine or meloxicam for soft-tissue surgery in sheep: a pilot study. *Animals*, 11(2), 423. [PMID: 33562143] [PMCID: PMC7914688] <https://doi.org/10.3390/ani11020423>

64. Chou WC, **Lin Z***. (2020). Probabilistic human health risk assessment of perfluorooctane sulfonate (PFOS) by integrating in vitro, in vivo toxicity, and human epidemiological studies using a Bayesian-based dose-response assessment coupled with physiologically based pharmacokinetic (PBPK) modeling approach. *Environment International*, 137:105581. [PMID: 32087483] <https://doi.org/10.1016/j.envint.2020.105581>
63. Cheng YH, He C, Riviere JE, Monteiro-Riviere NA, **Lin Z***. (2020). Meta-analysis of nanoparticle delivery to tumors using a physiologically based pharmacokinetic modeling and simulation approach. *ACS Nano*, 14(3): 3075-3095. [PMID: 32078303] [PMCID: PMC7098057] <https://doi.org/10.1021/acsnano.9b08142> [Featured at [K-State Today](#) and at [KSU CVM's Lifelines](#)] [Best Paper Award of the Year 2020 (Honorable Mention), Society of Toxicology Biological Modeling Specialty Section]
62. **Lin Z***, Li M, Wang YS, Tell LA, Baynes RE, Davis JL, Vickroy TW, Riviere JE. (2020). Physiological parameter values for physiologically based pharmacokinetic models in food-producing animals. Part I: Cattle and Swine. *Journal of Veterinary Pharmacology and Therapeutics*, 43(5):385-420. [PMID: 32270548] <https://doi.org/10.1111/jvp.12861> [One of the Top 10 Most-Downloaded Articles of 2020 in this journal]
61. Kleinhenz MD*, Magnin G, **Lin Z**, Griffin J, Kleinhenz KE, Montgomery S, Curtis A, Martin M, Coetzee JF*. (2020). Plasma concentrations of eleven cannabinoids in cattle following oral administration of industrial hemp (*Cannabis sativa*). *Scientific Reports*, 10(1):12753. [PMID: 32728233] [PMCID: PMC7391639] <https://doi.org/10.1038/s41598-020-69768-4> [Featured at [K-State Today](#)]
60. Lin YJ, **Lin Z***. (2020). Probabilistic Risk Assessment of Combined Exposure to Bisphenol A and its Analogues by Integrating ToxCast High-Throughput In Vitro Assays with In Vitro to In Vivo Extrapolation (IVIVE) via Physiologically Based Pharmacokinetic (PBPK) Modeling. *Journal of Hazardous Materials*, 399, 122856. [PMID: 32937695] <https://doi.org/10.1016/j.jhazmat.2020.122856>
59. Bates JL, Karriker LA, Rajewski SM, **Lin Z***, Ronette G, Li M, Riviere JE, Coetzee JF*. (2020). A study to assess the correlation between plasma, oral fluid and urine concentrations of flunixin meglumine with the tissue residue depletion profile in finishing age swine. *BMC Veterinary Research*, 16, 211. [PMID: 32571315] [PMCID: PMC7310148] <https://doi.org/10.1186/s12917-020-02429-w>
58. KuKanich K, KuKanich B, **Lin Z**, Rankin AJ, Hanzlicek AS, Palerme JS, Bach J, Cook AK, Juracek A, Joo H. (2020). Clinical pharmacokinetics and outcomes of oral fluconazole therapy in dogs and cats with naturally occurring fungal disease. *Journal of Veterinary Pharmacology and Therapeutics*, 43(6), 547-556. [PMID: 32656792] <https://doi.org/10.1111/jvp.12888>
57. Smith JS, Marmulak TL, Angelos JA, **Lin Z**, Rowe JD, Carlson JL, Shelver WL, Lee EA, Tell LA*. (2020). Pharmacokinetic parameters and estimated milk withdrawal intervals for domestic goats (*Capra aegagrus hircus*) after administration of single and multiple intravenous and subcutaneous doses of flunixin meglumine. *Frontiers in Veterinary Science*, 7:213. [PMID: 32509803] <https://doi.org/10.3389/fvets.2020.00213>
56. Xu N, Li M, Chou WC, **Lin Z***. (2020). A physiologically based pharmacokinetic model of doxycycline for predicting tissue residues and withdrawal intervals in grass carp (*Ctenopharyngodon idella*). *Food and Chemical Toxicology*, 137, 111127. [PMID: 31945393] [PMCID: PMC7248982] <https://doi.org/10.1016/j.fct.2020.111127>
55. Lin YJ*, Cheng CJ, Chen JW, **Lin Z***. (2020). Incorporating exogenous and endogenous exposures into dietary risk assessment of nitrate and nitrite in vegetables: a probabilistic integrated toxicokinetic modeling approach. *Journal of Agricultural and Food Chemistry*, 68(4):1079-1090. [PMID: 31885263] <https://pubs.acs.org/doi/10.1021/acs.jafc.9b06720>

54. Chou WC, **Lin Z***. (2019). Bayesian Evaluation of a Physiologically Based Pharmacokinetic (PBPK) Model for Perfluorooctane Sulfonate (PFOS) to Characterize the Interspecies Uncertainty between Mice, Rats, Monkeys, and Humans: Development and Performance Verification. *Environment International*, 129:408-422. [PMID: 31152982] <https://doi.org/10.1016/j.envint.2019.03.058> [**Best Paper Award of the Year 2019, Society of Toxicology Biological Modeling Specialty Section**]
53. Li M, Cheng YH, Chittenden JT, Baynes RE, Tell LA, Davis JL, Vickroy TW, Riviere JE, **Lin Z***. (2019). Integration of Food Animal Residue Avoidance Databank (FARAD) empirical methods for drug withdrawal interval determination with a mechanistic population-based interactive physiologically-based pharmacokinetic (iPBPK) modeling platform: example for flunixin meglumine administration. *Archives of Toxicology*, 93(7):1865-1880. [PMID: 31025081] <https://doi.org/10.1007/s00204-019-02464-z> [**2020 Society of Toxicology Best Postdoctoral Publication Award**]
52. **Lin Z**, He C, Magstadt DR, Cooper VL, Kleinhenz MD, Smith JS, Gorden PJ, Wulf LW, Coetzee JF*. (2019). Tissue residue depletion and estimation of extralabel meat withdrawal intervals for tulathromycin in calves after pneumatic dart administration. *Journal of Animal Science*, 97(9):3714-3726. [PMID: 31342061] <https://doi.org/10.1093/jas/skz231> [**Featured in the American Association of Bovine Practitioners (AABP) September 2019 Newsletter**]
51. Li M, Mainquist-Whigham C, Karriker LA, Wulf LW, Zeng D, Gehring R, Riviere JE, Coetzee JF, **Lin Z***. (2019). An integrated experimental and physiologically based pharmacokinetic modeling study of penicillin G in heavy sows. *Journal of Veterinary Pharmacology and Therapeutics*, 42(4):461-475. [PMID: 31012501] <https://doi.org/10.1111/jvp.12766> [**One of the Top 10% Most Downloaded Papers among work published between January 2018 and December 2019 in the first 12 months following online publication**]
50. Xu N, Li M, Fu Y, Zhang X, Dong J, Zhou S, Ai X*, **Lin Z***. (2019). Effect of temperature on plasma and tissue kinetics of doxycycline in grass carp (*Ctenopharyngodon idellus*) after oral administration, *Aquaculture*, 511, 734204. <https://doi.org/10.1016/j.aquaculture.2019.734204>
49. Xu N, Li M, Fu Y, Zhang X, Ai X*, **Lin Z***. (2019). Tissue residue depletion kinetics and withdrawal time estimation of doxycycline in grass carp, *Ctenopharyngodon Idella*, following multiple oral administrations. *Food and Chemical Toxicology*, 131, 110592. [PMID: 31220539] <https://doi.org/10.1016/j.fct.2019.110592>
48. DeLong R*, Cheng YH, Pearson P, **Lin Z**, Wouda R, Mathew EN, Hoffman A, Coffee C, Higginbotham ML*. (2019). Translating nanomedicine to comparative oncology: the case for combining zinc oxide nanomaterials with nucleic acid therapeutic and protein delivery for treating metastatic cancer. *Journal of Pharmacology and Experimental Therapeutics*, 370(3):671-681. [PMID: 31040175] [PMCID: PMC6806346] <https://doi.org/10.1124/jpet.118.256230>
47. Clapham MO, Martin KL, Davis JL, Baynes RE, **Lin Z**, Vickroy TW, Riviere JE, Tell LA*. (2019). Extralabel Drug Use in Wildlife and Game Animals. *Journal of the American Veterinary Medical Association*, 255(5): 555-568. [PMID: 31429657] <https://doi.org/10.2460/javma.255.5.555>
46. Sun X, Wang Y, Xia B, Li Z, Dai J, Qiu P, Ma A, **Lin Z**, Huang J, Wang J, Xie WB*, Wang J*. (2019). Methamphetamine produces cardiac damage and apoptosis by decreasing melusin. *Toxicology and Applied Pharmacology*, 378, 114543. [PMID: 30904475] <https://doi.org/10.1016/j.taap.2019.03.015>
45. Yang F, **Lin Z**, Riviere JE, Baynes RE*. (2019). Development and application of a population physiologically based pharmacokinetic model for florfenicol and its metabolite florfenicol amine in cattle. *Food and Chemical Toxicology*, 126: 285-294. [PMID: 30825586] <https://doi.org/10.1016/j.fct.2019.02.029>
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Pharmacokinetic Model. *Journal of Agricultural and Food Chemistry*, 67(5):1563-1571. [PMID: 30633497] <https://doi.org/10.1021/acs.jafc.8b07133>

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Extension/Outreach Article(s) (Non-Peer-Reviewed)

1. Baynes R, Davis J, **Lin Z**, Maunsell F, Riviere J, Tell L, Vickroy T. (2019) The Food Animal Residue Avoidance Databank: Reducing Chemical Residues in Animal Products. *Scientia*. Click [here](#) for a PDF copy. <https://doi.org/10.33548/SCIENTIA436>

BOOK(S) AND BOOK CHAPTER(S)

Book(s)

1. Physiologically Based Pharmacokinetic (PBPK) Modeling: Methods and Applications in Toxicology and Risk Assessment, 1st Edition, Edited by Jeffrey W. Fisher, Jeffery M. Gearhart, and Zhoumeng Lin. (2020). Imprint: Academic Press of Elsevier, Inc. No. of Pages: 346.

Press release at K-State Today: <https://www.k-state.edu/today/announcement/?id=66082>

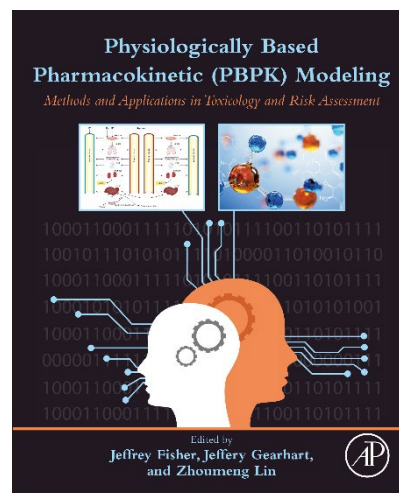
Available at: <https://www.elsevier.com/books/physiologically-based-pharmacokinetic-pbpbk-modeling/fisher/978-0-12-818596-4>

Book companion site contains model codes and other supplementary files:

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- **Lin Z**, Fisher JW. (2020). Chapter 1: A history and recent efforts of selected physiologically based pharmacokinetic modeling topics. In *Physiologically Based Pharmacokinetic (PBPK) Modeling: Methods and Applications in Toxicology and Risk Assessment* (1st Edition). Jeffrey W. Fisher, Jeffery M. Gearhart, and Zhoumeng Lin (Editors). Elsevier, Inc. Pages 1-26. <https://doi.org/10.1016/B978-0-12-818596-4.00001-1>

- Kabadi SV, **Lin Z.** (2020). Chapter 2: Introduction to Classical Pharmacokinetics. In *Physiologically Based Pharmacokinetic (PBPK) Modeling: Methods and Applications in Toxicology and Risk Assessment* (1st Edition). Jeffrey W. Fisher, Jeffery M. Gearhart, and Zhoumeng Lin (Editors). Elsevier, Inc. Pages 27-56. <https://doi.org/10.1016/B978-0-12-818596-4.00002-3>
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- Fisher JW, Campbell JL, **Lin Z.** (2020). Chapter 7: Metabolism and physiologically based pharmacokinetic models. In *Physiologically Based Pharmacokinetic (PBPK) Modeling: Methods and Applications in Toxicology and Risk Assessment* (1st Edition). Jeffrey W. Fisher, Jeffery M. Gearhart, and Zhoumeng Lin (Editors). Elsevier, Inc. Pages 161-174. <https://doi.org/10.1016/B978-0-12-818596-4.00007-2>
- **Lin Z,** Cheng YH, Chou WC, Li M. (2020). Chapter 10: Physiologically based pharmacokinetic model calibration, evaluation, and performance assessment. In *Physiologically Based Pharmacokinetic (PBPK) Modeling: Methods and Applications in Toxicology and Risk Assessment* (1st Edition). Jeffrey W. Fisher, Jeffery M. Gearhart, and Zhoumeng Lin (Editors). Elsevier, Inc. Pages 243-280. <https://doi.org/10.1016/B978-0-12-818596-4.00010-2>



Book chapter(s)

1. Yang RSH, Lu Y, **Lin Z.** (2022). Chapter 8: The application of physiologically based pharmacokinetic (PBPK) modeling to risk assessment. In *Risk Assessment for Environmental Health* (2nd Edition). Mark G. Robson, William A. Toscano, Qingyu Meng, Debra A. Kaden (Editors). Imprint: CRC Press, Taylor & Francis Group. Pages: 153-178. <https://doi.org/10.1201/9780429291722>
2. Samberg ME, **Lin Z,** Monteiro-Riviere NA. (2015). In vitro and in vivo toxicity and pharmacokinetics of silver nanoparticles. In Bharat Bhushan (Editor), *Encyclopedia of Nanotechnology*. Springer Science+Business Media Dordrecht. pp 1-14. https://doi.org/10.1007/978-94-007-6178-0_331-2

ABSTRACTS AND CONFERENCE PRESENTATIONS/PROCEEDINGS

1. **Lin Z,** Chou WC, Chen Q, Yuan L, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE. Development of an artificial intelligence-based PBPK model for nanoparticles in tumor-bearing mice. *American Association of Pharmaceutical Scientists (AAPS) 2023 PharmSci 360*, Orlando, FL. (October 22-25, 2023)
2. **Lin Z.** Introduction to the history and representative applications of machine learning and artificial intelligence in toxicological sciences. Part of the Session entitled “ChatGPT Is Smart Enough to Pass the MBA and USMLE Tests. . . Is DABT Next?”. (Chairs: Ivan Rusyn and Antony Williams) *The 2023 Toxicology Forum Summer Meeting*, Ritz-Carlton Hotel, Pentagon City, Virginia. (July 24-26, 2023)

3. Wu X, Chou WC, Maunsell FP, **Lin Z**. Predicting withdrawal times of flunixin in cattle following dermal exposure using a PBPK model. Lake Nona Leadership Council Meeting, Orlando, FL. (March 27-28, 2023) [**Selected to do a Platform Presentation (shark tank style)**]
4. Chen Q, Yuan L, Chou WC, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE, **Lin Z**. Pharmacostatistical analysis of tissue distribution of nanoparticles in tumor-bearing mice. Lake Nona Leadership Council Meeting, Orlando, FL. (March 27-28, 2023)
5. Hajjawi M, **Lin Z**. Development of a population pharmacokinetic model for oxytetracycline in sheep using a nonlinear mixed effects approach. Lake Nona Leadership Council Meeting, Orlando, FL. (March 27-28, 2023)
6. Chou WC, Chen Q, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE, **Lin Z**. An integrated computational approach using machine learning, artificial intelligence and PBPK modeling to predict nanoparticle delivery to tumors. The 62nd Annual Meeting of Society of Toxicology, Nashville, TN. The Toxicologist, Supplement to *Toxicological Sciences*, 192, (S1), p. 64, abstract #: 2029. (March 19-23, 2023) [**Selected to do a Platform Presentation as part of the “Enhancing Toxicology with Machine Learning” Platform Session**]
7. Chen Q, Yuan L, Chou WC, Cheng YH, He C, Monteiro-Riviere NA, Riviere JE, **Lin Z**. Pharmacokinetic and meta-analysis of tissue distribution of nanoparticles in tumor-bearing mice. The 62nd Annual Meeting of Society of Toxicology, Nashville, TN. The Toxicologist, Supplement to *Toxicological Sciences*, 192, (S1), p. 495, abstract/poster board #: 4702/P608. (March 19-23, 2023)
8. Chou WC, Cheng YH, Tell LA, Baynes RE, Maunsell FP, Davis JL, Riviere JE, **Lin Z**. A web-based interactive generic physiologically based pharmacokinetic (igPBPK) platform and its application to predict meat and milk residues and withdrawal intervals for per- and poly-fluoroalkyl substances (PFAS) in beef and dairy cattle. The 62nd Annual Meeting of Society of Toxicology, Nashville, TN. The Toxicologist, Supplement to *Toxicological Sciences*, 192, (S1), p. 413, abstract/poster board #: 4379/P246. (March 19-23, 2023)
9. Wu X, Chou WC, Maunsell FP, **Lin Z**. Development of a Physiologically Based Pharmacokinetic (PBPK) Model for Flunixin in Cattle and Swine Following Dermal Exposure. The 62nd Annual Meeting of Society of Toxicology, Nashville, TN. The Toxicologist, Supplement to *Toxicological Sciences*, 192, (S1), p. 400, abstract/poster board #: 4325/P190. (March 19-23, 2023) [**2023 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Award (Honorable Mention)**]
10. Chou WC, Tell LA, **Lin Z**. An interactive generic physiologically based pharmacokinetic modeling platform to predict meat and milk residues and withdrawal intervals for perfluorooctanoic acid, perfluorooctane sulfonate and perfluorohexane sulfonate in beef and dairy cattle. Society for Risk Analysis (SRA) Annual Meeting, Tampa, FL. (December 4-8, 2022) (Selected to do a Platform Presentation; Presenter: Lin Z. Section T4-G: Innovative Approaches in Food Safety Risk Management)
11. Chou WC, Cheng YH, Riviere JE, Monteiro-Riviere NA, Kreyling WG, **Lin Z**. Superiority of a new route-specific versus traditional route-to-route extrapolation approach in developing a physiologically based pharmacokinetic model for gold nanoparticles in rats. Lake Nona Leadership Council Meeting, Orlando, FL. (April 4-5, 2022)
12. Yuan L, Chou WC, Tell LA, Baynes RE, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. Development and application of a web-based interactive physiologically based pharmacokinetic (iPBPK) model for meloxicam in broiler chickens and laying hens. Lake Nona Leadership Council Meeting, Orlando, FL. (April 4-5, 2022)
13. **Lin Z**, Chou WC. Applications of PBPK Models for Drugs in Cattle, Swine, Chickens, Sheep, and Goats for Animal-Derived Food Safety Assessment. Part of the Symposium entitled “Leveraging Physiologically Based Pharmacokinetic (PBPK) Modeling for Refining Safety Assessment of Food,

Drugs, and Chemicals under Data-Rich and Data-Poor Conditions". (Chairs: Cecilia Tan and Jeanne Domoradzki) *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 14, abstract #: 1055. (March 27-31, 2022) (Prepared by Dr. Lin and Presented by Dr. Chou)

14. Chou WC, Cheng YH, Tell LA, Baynes RE, Maunsell FP, Davis JL, Riviere JE, **Lin Z**. Development of an interactive physiologically based pharmacokinetic (iPBPK) modelling platform to predict meat and milk residues and withdrawal intervals for perfluorooctane sulfonate (PFOS) in beef and dairy cattle. *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 304, abstract/poster board #: 4054/P753. (March 27-31, 2022)
15. Yuan L, Chou WC, Tell LA, Baynes RE, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. Development and application of a web-based interactive physiologically based pharmacokinetic (iPBPK) model for meloxicam in broiler chickens and laying hens. *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 292, abstract/poster board #: 3998/P696. (March 27-31, 2022) **[2022 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Award (Honorable Mention)]**
16. DeWoskin R, **Lin Z**, Li M, Cheng Y, Spires J, Lukacova V, Szeto K, Baynes R, Riviere J. Rapid PBPK Model Parameterization for Estimating Food Animal Tissue Residues: Case Study Using ADMET Predictor and GastroPlus. *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 305, abstract/poster board #: 4061/P760. (March 27-31, 2022)
17. Chou WC, Cheng YH, Riviere JE, Monteiro-Riviere NA, Kreyling WG, **Lin Z**. Superiority of a new route-specific versus traditional route-to-route extrapolation approach in developing a physiologically based pharmacokinetic model for gold nanoparticles in rats. *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 224, abstract/poster board #: 3686/P335. (March 27-31, 2022)
18. Riad MH, Tell LA, Baynes RE, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. Predicting florfenicol and florfenicol amine tissue distribution and estimating withdrawal intervals in market-age sheep and goats using a physiologically based pharmacokinetic model. *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 293, abstract/poster board #: 4001/P699. (March 27-31, 2022)
19. Chen Q, Chou WC, **Lin Z**. The application of toxicogenomics and physiologically based pharmacokinetic (PBPK) modeling to the human health risk assessment of perfluorooctane sulfonate (PFOS). *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 62, abstract #: 2007. (Selected to do a Platform Presentation) (March 27-31, 2022) **[2022 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Award (Honorable Mention)]**
20. Ghose R., Tao G, Sun R, **Lin Z**. Soy isoflavones prevents irinotecan gastrointestinal toxicity by altering drug metabolism and disposition. *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 447, abstract/poster board #: 4716/P770. (March 27-31, 2022)
21. Tao G, **Lin Z**, Ghose R. Development of a physiologically based pharmacokinetic model to predict irinotecan disposition in mice during inflammation. *The 61st Annual Meeting of Society of Toxicology*, San Diego, CA. *The Toxicologist*, Supplement to *Toxicological Sciences*, 186, (S1), p. 450, abstract/poster board #: 4731/P785. (March 27-31, 2022) **[2022 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Award (Honorable Mention)]**
22. Chou WC, Baynes RE, Tell LA, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. A web-based platform based on a generic physiologically based pharmacokinetic (PBPK) model to predict withdrawal

intervals of flunixin, florfenicol, and penicillin G in cattle and swine. Annual Meeting of Southeastern Society of Toxicology (SESOT), virtual. (November 18-19, 2021)

23. Riad MH, Tell LA, Baynes RE, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. Developing a web-based iPBPk interface to estimate withdrawal intervals for florfenicol and florfenicol amine in sheep and goats. Annual Meeting of Southeastern Society of Toxicology (SESOT), virtual. (November 18-19, 2021)
24. Chen Q, Chou WC, **Lin Z**. The implementation of toxicogenomics and physiologically based pharmacokinetic (PBPK) modeling to the human health risk assessment of perfluorooctane sulfonate (PFOS). Annual Meeting of Southeastern Society of Toxicology (SESOT), virtual. (November 18-19, 2021)
25. Yuan L, Chou WC, Tell LA, Baynes RE, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. A web-based interactive physiologically based pharmacokinetic (iPBPK) model for meloxicam in domestic chickens. Annual Meeting of Southeastern Society of Toxicology (SESOT), virtual. (November 18-19, 2021).
26. Maunsell F, Baynes R, Davis J, Foster D, Jaber-Douraki M, Lin Z, Riviere J, Tell L. FARAD: How we respond to withdrawal inquiries. American Association of Bovine Practitioners (AABP) Proceedings, 54(2), 9-11. (Salt Lake City, Utah. October 7-9, 2021).
27. Chou WC, Cheng YH, Riviere JE, Monteiro-Riviere NA, Kreyling Wolfgang, **Lin Z**. Development of a web-based interface to facilitate nanomedicine design and safety assessment through the prediction of biodistribution of nanoparticles. The 60th Annual Meeting of Society of Toxicology (Virtual). The Toxicologist, Supplement to *Toxicological Sciences*, 180(S1), p. 159, abstract/poster board #: 2365/P103. (March 12-26, 2021)
28. Yuan L, Chou WC, Riad MH, Cheng YH, Tell LA, Baynes RE, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. Development of a physiologically based pharmacokinetic (PBPK) model for meloxicam in broiler chickens and laying hens. The 60th Annual Meeting of Society of Toxicology (Virtual). The Toxicologist, Supplement to *Toxicological Sciences*, 180(S1), p. 201, abstract/poster board #: 2539/P277. (March 12-26, 2021)
29. Riad MH, Baynes RE, Tell LA, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. Development and application of a physiologically based pharmacokinetic model to predict oxytetracycline tissue distribution and withdrawal intervals in market-age sheep. The 60th Annual Meeting of Society of Toxicology (Virtual). The Toxicologist, Supplement to *Toxicological Sciences*, 180(S1), p. 158, abstract/poster board #: 2364/P102. (March 12-26, 2021)
30. Chou WC, Baynes RE, Tell LA, Davis JL, Maunsell FP, Riviere JE, **Lin Z**. Development of an interactive generic physiologically based pharmacokinetic (igPBPK) modelling platform to predict drug withdrawal intervals in food animals. The 60th Annual Meeting of Society of Toxicology (Virtual). The Toxicologist, Supplement to *Toxicological Sciences* 180(S1), p. 161, abstract/poster board #: 2375/P113. (March 12-26, 2021)
31. Riad MH, Lin Z. Assessing the risk of COVID-19 transmission in different counties of Kansas and identifying the relative impact of environmental factors and human demography. The 60th Annual Meeting of Society of Toxicology (Virtual). The Toxicologist, Supplement to *Toxicological Sciences*, 180(S1), p. 290, abstract/poster board #: 3007/P145. (March 12-26, 2021)
32. Martin M, Smith S, Kleinhenz M, Magnin G, **Lin Z**, Kuhn D, Montgomery S, Coetzee J. Comparative pharmacokinetics of flunixin meglumine and meloxicam in tilapia (*Oreochromis spp.*). Midwest Section Meeting of American Society of Animal Science, Omaha, NE. (March 8-10, 2021)
33. **Lin Z**, Li M, Baynes RE, Tell LA, Davis JL, Vickroy TW, Riviere JE. Development and application of an interactive physiologically based pharmacokinetic (iPBPK) model interface to estimate withdrawal intervals for penicillin G in cattle and swine. The 59th Annual Meeting of Society of

Toxicology. Anaheim, CA. The Toxicologist, Supplement to *Toxicological Sciences*, 174(1), p. 458, abstract #2932. (March 15-19, 2020)

34. Chou W, Lin Z. Development of gestational and lactational physiologically based pharmacokinetic (PBPK) model for perfluorooctane sulfonate (PFOS) in rats and humans with a Bayesian framework to derive health-based toxicity values. The 59th Annual Meeting of Society of Toxicology. Anaheim, CA. The Toxicologist, Supplement to *Toxicological Sciences*, 174(1), p. 509, abstract #3143. (March 15-19, 2020) **[2020 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Award (Honorable Mention)]**
35. Cheng Y, Chou W, Lin Z. Probabilistic physiologically based pharmacokinetic model for per- and polyfluoroalkyl substances (PFAS) in beef cattle and dairy cows for food safety assessment. The 59th Annual Meeting of Society of Toxicology. Anaheim, CA. The Toxicologist, Supplement to *Toxicological Sciences*, 174(1), p. 464, abstract #2956. (March 15-19, 2020) **[2020 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Award (Honorable Mention)]**
36. Li M, Wang Y, Tell LA, Baynes RE, Davis JL, Vickroy TW, Riviere JE, Lin Z. Physiological parameter values for physiologically based pharmacokinetic models in food-producing animals. Part I: Cattle and swine. The 59th Annual Meeting of Society of Toxicology. Anaheim, CA. The Toxicologist, Supplement to *Toxicological Sciences*, 174(1), p. 461, abstract #2943. (March 15-19, 2020)
37. Cheng Y, He C, Riviere JE, Monteiro-Riviere NA, Lin Z. Physiologically based pharmacokinetic modeling and simulation of nanoparticle delivery to tumors in mice. The 59th Annual Meeting of Society of Toxicology. Anaheim, CA. The Toxicologist, Supplement to *Toxicological Sciences*, 174(1), p. 460, abstract #2940. (March 15-19, 2020)
38. Lin Y, Cheng C, Lin Z. An integrated approach of dietary exposure and physiologically-motivated toxicokinetic modeling for probabilistic risk assessment of nitrate and nitrite through vegetable consumption. The 59th Annual Meeting of Society of Toxicology. Anaheim, CA. The Toxicologist, Supplement to *Toxicological Sciences*, 174(1), p. 290, abstract #2215. (March 15-19, 2020)
39. Chou WC, Lin Z. Application of a gestational physiologically based pharmacokinetic (PBPK) model for perfluorooctane sulfonate (PFOS) in risk assessment for pregnant women and fetuses. Society for Risk Analysis (SRA) Annual Meeting, Arlington, VA. (December 8-12, 2019)
40. Cheng YH, Riviere JE, Monteiro-Riviere NA, Lin Z. Assessing factors influencing tumor delivery efficiency of nanoparticles in tumor-bearing mice using a physiologically based pharmacokinetic modeling and simulation approach. The Tenth American Conference on Pharmacometrics (ACoP10), Orlando, FL. (October 20-23, 2019)
41. Li M, Baynes RE, Tell LA, Davis JL, Vickroy TW, Riviere JE, Lin Z. Development and application of interactive physiologically based pharmacokinetic (iPBPK) modeling platform to estimate withdrawal intervals for drugs in food-producing animals. 2019 South Central Society of Toxicology (SCSOT) Annual Meeting, Louisiana State University Health Sciences, Shreveport, LA. (October 17-18, 2019)
42. Xu N, Chou WC, Li M, Lin Z. A physiologically based pharmacokinetic model of doxycycline for predicting tissue residues and withdrawal intervals in grass carp (*Ctenopharyngodon idellus*). The 21st Biennial Symposium of the American Academy of Veterinary Pharmacology and Therapeutics (AAVPT), Overland Park, KS. (August 23-26, 2019)
43. Lin Z, Li M, Baynes RE, Tell LA, Davis JL, Vickroy TW, Riviere JE. Development and application of interactive physiologically based pharmacokinetic (iPBPK) modeling platform to estimate withdrawal intervals for drugs in food-producing animals across species, ages, administration routes and doses. The 21st Biennial Symposium of the American Academy of Veterinary Pharmacology and Therapeutics (AAVPT), Overland Park, KS. (August 23-26, 2019)

44. Chou WC, **Lin Z**. Probabilistic risk assessment of perfluorooctanesulfonate (PFOS) by integrating in vitro and in vivo toxicity with physiologically based pharmacokinetic models in multiple species. International Union of Toxicology (IUTOX) 15th International Congress of Toxicology (ICTXV), Honolulu, Hawaii. (July 15-18, 2019)
45. Li M, Cheng Y, Chittenden J, Baynes R, Tell L, Davis J, Vickroy T, Riviere J, **Lin Z**. Integration of Food Animal Residue Avoidance Databank (FARAD) Empirical Methods for Drug Withdrawal Interval Determination with a Mechanistic Population-Based Interactive Physiologically Based Pharmacokinetic (iPBPK) Modeling Platform: Example for Flunixin Meglumine Administration. The 58th Annual Meeting of Society of Toxicology. Baltimore, MD. The Toxicologist, 168, p. 191, #1816. (March 10-14, 2019) (**SOT Risk Assessment Specialty Section (RASS) Perry J. Gehring Best Postdoctoral Fellow Award, the AACT and InnoStar Best Abstract Award, and the Biological Modeling Specialty Section Best Trainee Abstract Finalist Award**)
46. Chou W, **Lin Z**. Bayesian Evaluation of Physiologically Based Pharmacokinetic (PBPK) Modeling for Perfluorooctanesulfonate (PFOS) to Characterize the Interspecies Uncertainty between Mice, Rats, Monkeys, and Humans: Development and Performance Verification. The 58th Annual Meeting of Society of Toxicology. Baltimore, MD. The Toxicologist, 168, p. 168, #1717. (March 10-14, 2019) (**SOT Biological Modeling Specialty Section (BMSS) Andersen-Clewell Trainee Award, and SOT Regulatory and Safety Evaluation Specialty Section (RSESS) Postdoctoral Excellence Award**) (Platform Presentation)
47. Cheng Y, Riviere J, Monteiro-Riviere N, **Lin Z**. Assessing Delivery Efficiency of Nanoparticles to Tumors in Tumor-Bearing Mice Using a Physiologically Based Pharmacokinetic Modeling and Simulation Approach. The 58th Annual Meeting of Society of Toxicology. Baltimore, MD. The Toxicologist, 168, p. 476, #3123. (March 10-14, 2019) (**SOT Regulatory and Safety Evaluation Specialty Section (RSESS) Postdoctoral Excellence Award, and the Biological Modeling Specialty Section Best Trainee Abstract Finalist Award**)
48. Wang YS, Li M, **Lin Z**. A physiologically based pharmacokinetic model for penicillin G in calves. Annual Meeting of Central States Society of Toxicology (CSSOT). Manhattan, KS. (October 18-19, 2018) (**Outstanding Poster Presentation Award**)
49. Li M, Gehring R, Riviere JE, **Lin Z**. Application of Population Physiologically Based Pharmacokinetic (PBPK) Models and Interactive PBPK Platform for Penicillin G in Food-producing Animals to Facilitate Food Safety Assessment. Annual Meeting of Central States Society of Toxicology (CSSOT). Manhattan, KS. (October 18-19, 2018)
50. Cheng YH, Riviere JE, Monteiro-Riviere, **Lin Z**. Risk assessment of gold nanoparticles by integrating in vitro and in vivo toxicity with physiologically based pharmacokinetic modeling. Annual Meeting of Central States Society of Toxicology (CSSOT). Manhattan, KS. (October 18-19, 2018)
51. Zheng Y, Li M, Cheng YH, KuKanich B, **Lin Z**. Assessing the breed-specific difference in the pharmacokinetics of fentanyl in dogs using physiologically based pharmacokinetic modeling. Annual Meeting of Central State Society of Toxicology (CSSOT). Manhattan, KS. (October 18-19, 2018)
52. Mao S, Li M, KuKanich B, **Lin Z**. Development of a physiologically based pharmacokinetic model for morphine in dogs. Annual Meeting of Central States Society of Toxicology (CSSOT). Manhattan, KS. (October 18-19, 2018)
53. KuKanich K, KuKanich B, **Lin Z**, Hanzlicek A, Rankin A, Palerme JS, Cook A, Bach J. Pharmacokinetics of oral fluconazole in a clinical population of dogs and cats. American College of Veterinary Internal Medicine (ACVIM) Forum, Seattle, WA. (June 14-16, 2018)
54. Coetzee JF, Ensley S, Magnin-Bissel G, **Lin Z**, Bissel P, Joo H, Zhang Y. Analytical chemistry and computational capabilities for interspecies pharmacokinetics, exposure and toxicity assessment of drugs and environmental chemicals. K-State Research Showcase, Olathe, KS. (May 16, 2018)

55. Lin Z, Cheng YH, Riviere JE, Monteiro-Riviere. Probabilistic risk assessment of gold nanoparticles by integrating in vitro and in vivo toxicity with physiologically based pharmacokinetic modeling. The 57th Annual Meeting of Society of Toxicology. San Antonio, TX. The Toxicologist, 162, p. 562, #3175. (March 11-15, 2018)
56. Cheng YH, Riviere JE, Monteiro-Riviere NA, Kreyling WG, Lin Z. A general physiologically based pharmacokinetic model for gold nanoparticles of different sizes with multiple administration routes in rats. The 57th Annual Meeting of Society of Toxicology. San Antonio, TX. The Toxicologist, 162, p. 562, #3176. (March 11-15, 2018) (**Top 10 Best Risk-assessment Related Abstracts**, and **Biological Modeling Specialty Section Perry J. Gehring Biological Modeling Endowment Award**)
57. Li M, Gehring R, Riviere JE, Lin Z. Application of population physiologically based pharmacokinetic model for penicillin G in dairy cows to facilitate food safety assessment. The 57th Annual Meeting of Society of Toxicology. San Antonio, TX. The Toxicologist, 162, p. 526, #3174. (March 11-15, 2018) (**Postdoctoral Excellence Award of Regulatory & Safety Evaluation Specialty Section of SOT**)
58. Li M, Lin Z. A preliminary physiologically based pharmacokinetic model for glyphosate in rats. The 57th Annual Meeting of Society of Toxicology. San Antonio, TX. The Toxicologist, 162, p. 527, #3179. (March 11-15, 2018)
59. Elwell-Cuddy T, Li M, KuKanich B, Lin Z. The construction and application of a population physiologically based pharmacokinetic model for methadone in Beagles and Greyhounds. The 57th Annual Meeting of Society of Toxicology. San Antonio, TX. The Toxicologist, 162, p. 525, #3173. (March 11-15, 2018) (**SOT Committee on Diversity (CDI) Undergraduate Travel Award**)
60. Cheng YH, Lin Z. Predicting tissue distribution and tumor delivery of gold nanoparticles in adult mice using a preliminary physiologically based pharmacokinetic modeling framework. End2Cancer: Emerging nanotechnology & drug delivery applications for cancer. Oklahoma City, OK. (December 14-15, 2017)
61. Volkova V, Cazer CL, Li M, Lin Z, Gröhn YT. Applications of joint modelling of within-host ecology of enteric bacteria and pharmacokinetics of antimicrobial drugs for identification of modalities for reducing bacterial antimicrobial resistance. Sixth International Conference on Infectious Disease Dynamics (EPIDEMICS6). Sitges (near Barcelona), Spain. (November 29 – December 1, 2017)
62. Lin Z, Li M, Gehring R, Riviere JE. Development of population physiologically based pharmacokinetic models for penicillin G in swine, beef cattle, and dairy cows for food safety assessment. The Chinese 14th Conference on Veterinary Pharmacology and Toxicology. Qingdao, China. (October 17-20, 2017)
63. Zeng D, Lin Z, Zeng Z, Fang B, Li M, Gehring R, Riviere JE, Sun Y. A physiologically based pharmacokinetic model for T-2 toxin in chicken. The Chinese 14th Conference on Veterinary Pharmacology and Toxicology. Qingdao, China. (October 17-20, 2017)
64. Li M, Gehring R, Riviere JE, Lin Z. Application of population physiologically based pharmacokinetic models for penicillin G in food-producing animals to facilitate food safety assessment. Kansas State University Postdoc Appreciation Week Poster and Research Presentation. Manhattan, KS. (September 18-22, 2017)
65. Lin Z, Jaber-Douraki M, Monteiro-Riviere NA, Riviere JE. Nano In-vitro Cellular Uptake Simulator (NICUS): A New Model to Quantitate Nanomaterial Endocytosis Kinetics and Intracellular Dose. The 56th Annual Meeting of Society of Toxicology. Baltimore, MD. The Toxicologist, 156, p. 303, #2281. (March 12-16, 2017)
66. Lin Z, Fue X, Shannahan J. Investigation of Nonmaterial-Induced Immune Responses Utilizing In Vitro Dosimetry. The 56th Annual Meeting of Society of Toxicology. Baltimore, MD. The Toxicologist, 156, p. 446, #2894. (March 12-16, 2017)

67. Zeng D, **Lin Z**, Fang B, Li M, Gehring R, Riviere JE, Zeng Z. Pharmacokinetics of mequindox and its marker residue 1,4-bisdesoxymequindox in swine following repeated oral and intramuscular administration: an experimental study coupled with population physiologically based pharmacokinetic modeling. The American Academy of Veterinary Pharmacology and Therapeutics (AAVPT) 20th Biennial Symposium, Potomac, MD. (May 21-24, 2017)
68. Moczarnik J, Berger D, Noxon J, Le Vine D, Wulf L, **Lin Z**, Gehring R, Coetzee J. Pharmacokinetics and relative oral bioavailability of two oral amoxicillin – clavulanic acid formulations in healthy adult dogs – a preliminary investigation. North American Veterinary Dermatology Forum. Orlando, FL. (April 26-29, 2017)
69. Li M, Gehring R, Riviere JE, **Lin Z**. Development and application of a population physiologically based pharmacokinetic model for penicillin G in swine and cattle for food safety assessment. Phi Zeta Research Day, College of Veterinary Medicine, Kansas State University, Manhattan, KS. (March 7, 2017)
70. Elwell-Cuddy T, KuKanich B, **Lin Z**. Development and application of a multi-route physiologically based pharmacokinetic model for methadone in Beagle and Greyhound dogs. Phi Zeta Research Day, College of Veterinary Medicine, Kansas State University, Manhattan, KS. (March 7, 2017)
71. Jin S, Gehring R, Riviere JE, **Lin Z**. Statistical simulations of the impact of variations in marker residue to total residue ratios of food animal drugs on human food safety. 2016 Research and the State Graduate Student Poster Session of Kansas State University, Manhattan, KS. (November 2, 2016)
72. Li M, Gehring R, Riviere JE, **Lin Z**. Development of a physiologically based pharmacokinetic model for penicillin G in swine and cattle for food safety assessment. Annual Meeting of the Central States Society of Toxicology, Iowa City, Iowa. (November 17-18, 2016)
73. **Lin Z**, Monteiro-Riviere NA, Kannan R, Riviere JE. A computational framework for interspecies pharmacokinetics, exposure and toxicity assessment of gold nanoparticles. The 55th Annual Meeting of Society of Toxicology. New Orleans, LA. The Toxicologist, 150, p. 117, #1504. (March 13-17, 2016)
74. Monteiro-Riviere NA, Ortega MT, Choi K, Koci J, **Lin Z**, Jeffery B, Riviere JE. Comparative in vitro cytotoxicity of 20 potential food ingredients in canine liver, kidney, bone marrow-derived mesenchymal stem cells and enterocyte-like cells. The 55th Annual Meeting of Society of Toxicology. New Orleans, LA. The Toxicologist, 150, p. 487, #3079. (March 13-17, 2016)
75. Wang H, Chen R, Chen L, Qiu P, Xu J, Huang E, Liu C, **Lin Z**, Xie W. DNA damage-inducible transcript 4 (DDIT4) mediates methamphetamine-induced autophagy and apoptosis through mTOR signaling pathway in cardiomyocytes. The 55th Annual Meeting of Society of Toxicology. New Orleans, LA. The Toxicologist, 150, p. 433, #2843. (March 13-17, 2016)
76. Xie W, Cai D, Qiao D, Yue X, Wang Q, Li D, **Lin Z**, Wang H. Nupr1/Chop signal axis is involved in mitochondrion-related endothelial cell apoptosis induced by methamphetamine. The 55th Annual Meeting of Society of Toxicology. New Orleans, LA. The Toxicologist, 150, p. 78, #1329. (March 13-17, 2016)
77. Huang L, **Lin Z**, Zhou X, Zhu M, Gehring R, Riviere JE, Yuan Z. Estimation of residue depletion of cyadox and its marker residue in edible tissues of pigs using physiologically based pharmacokinetic modelling. The 13th Chinese Veterinary Pharmacology and Toxicology Meeting. Changsha, China. (October 20-24, 2015)
78. **Lin Z**, Monteiro-Riviere NA, Riviere JE. Prediction and comparison of size-dependent biodistribution of polyethylene glycol-coated gold nanoparticles in adult mice: a physiologically based pharmacokinetic model. The 54th Annual Meeting of Society of Toxicology. San Diego, CA. The Toxicologist, 144, p. 65, #305. (March 22-26, 2015)

79. Riviere JE, **Lin Z**, Li M. Toxicokinetic approaches to improving accuracy of drug withdrawal times in food producing animals to avoid toxic violative tissue residues. The 35th Annual Meeting of the American College of Toxicology. Orlando, FL. p. 65, #P-105. (November 9-12, 2014)
80. **Lin Z**, Monteiro-Riviere NA, Riviere JE. Prediction and comparison of size-dependent biodistribution of polyethylene glycol-coated gold nanoparticles in adult mice: a physiologically based pharmacokinetic model. Annual Meeting of Central States Society of Toxicology. Kansas City, MO. (October 16-17, 2014)
81. **Lin Z**, Roede JR, He C, Jones DP, Filipov NM. Short-term atrazine exposure alters the plasma metabolome of male C57BL/6 mice and disrupts specific metabolic pathways. Adverse Outcome Pathways: From Research to Regulation Workshop. Bethesda, MD. (September 3-5, 2014) (Platform Presentation)
82. England E, Krishna S, **Lin Z**, Yang JY, Della-Fera MA, Meagher RB, Harn DA, de La Serre C, Baile CA, Filipov NM. High fat diet-induced alterations in hippocampal gene expression in young adult female mice. Society for Neuroscience 44th Annual Meeting. Washington, DC. (November 15-19, 2014)
83. Miller CN, Krishna S, **Lin Z**, Della-Fera MA, Harn DA, de la Serre C, Baile CA, Filipov NM. Early sex difference in hepatic metabolic signaling in offspring of obese female mice. The FASEB Journal, 28(1 Supplement):1033.11. Experimental Biology Meeting. San Diego, CA. (April 26-30, 2014)
84. Krishna S, **Lin Z**, Filipov NM. Central and peripheral effects in adult female C57BL/6 mice caused by high fat diet exposure. Southeast Neuroscience Conference, Augusta, GA. (April 19, 2014)
85. **Lin Z**, Filipov NM, Dodd CA. Gestational and lactational exposure to atrazine via the drinking water causes specific behavioral deficits and selectively alters monoaminergic systems in C57BL/6 mouse dams, juvenile and adult offspring. The 53rd Annual Meeting of Society of Toxicology. Phoenix, AZ. The Toxicologist, 138:484, #1837. (March 23-27, 2014)
86. **Lin Z**, Dodd CA, Filipov NM. Gestational and lactational exposure to atrazine via the drinking water causes specific behavioral deficits and selectively alters monoaminergic systems in C57BL/6 mouse dams, juvenile and adult offspring. Annual Meeting of Southeastern Society of Toxicology. Atlanta, GA. (October 7-8, 2013) (**SESOT Student Platform Presentation Award [2nd Place]**)
87. **Lin Z**, Fisher JW, Wang R, Ross MK, Filipov NM. Development and optimization of physiologically-based pharmacokinetic models for the herbicide atrazine in the rat dam, fetus and neonate. The University of Georgia Interdisciplinary Toxicology Program (ITP) Annual Retreat. Athens, GA. (April 5, 2013)
88. **Lin Z**, Fisher JW, Filipov NM. Gestational and lactational physiologically-based pharmacokinetic (PBPK) models for the herbicide atrazine in rats: development and optimization. The 52nd Annual Meeting of Society of Toxicology. San Antonio, TX. The Toxicologist, 132:105, #490. (March 10-14, 2013)
89. Chilton J, Culp BR, Galland KL, Le JN, McCabe JA, **Lin Z**, Filipov NM, Stice SL. Scalable, HTS/HCI-amenable and NURR1-expressing dopaminergic progenitor cells derived from human embryonic stem cells. The 52nd Annual Meeting of Society of Toxicology. San Antonio, TX. The Toxicologist, 132:257, #1202. (March 10-14, 2013)
90. **Lin Z**, Dodd CA, Filipov NM. Behavioral and neurochemical alterations caused by a short-term exposure of male C57BL/6 mice to the herbicide atrazine. The 51st Annual Meeting of Society of Toxicology. San Francisco, CA. The Toxicologist, 126:549, #2544. (March 11-15, 2012)
91. **Lin Z**, Fisher JW, Filipov NM. Development of comprehensive physiologically based pharmacokinetic models of the herbicide atrazine in the rat dam, fetus, and neonate. The University of Georgia-College of Veterinary Medicine Science of Veterinary Medicine Research Day. Athens, GA. (October 12, 2012) (Platform Presentation)

92. **Lin Z**, Fisher JW, Filipov NM. Estimation of placental transfer and tissue distribution of atrazine and its main metabolites in the rat dam and fetus with physiologically based pharmacokinetic modeling. Annual Meeting of Southeastern Society of Toxicology. Athens, GA. (October 8-9, 2012) (Platform Presentation)
93. **Lin Z**, Dodd CA, Filipov, NM. Behavioral and neurochemical alterations caused by a short-term exposure of male C57BL/6 mice to the herbicide atrazine. The University of Georgia Interdisciplinary Toxicology Program Annual Retreat. Athens, GA. (April 13, 2012) (Platform Presentation)
94. **Lin Z**, Dodd CA, Georgieva II, Filipov NM. Effects of atrazine and its metabolite diaminochlorotriazine on undifferentiated and differentiating N27 dopaminergic cells. The 50th Annual Meeting of Society of Toxicology. Washington, DC. The Toxicologist, 120:290, #1357. (March 6-10, 2011)
95. **Lin Z**, Dodd CA, Filipov NM. Disruption of motor and cognitive behaviors and alteration of monoamines in the striatum and prefrontal cortex of male C57BL/6 mice by a short-term exposure to the herbicide atrazine. Annual Meeting of Southeastern Society of Toxicology. Atlanta, GA. (October 19-20, 2011) (Platform Presentation)
96. **Lin Z**, Fisher JW, Ross MK, Filipov NM. Physiologically based pharmacokinetic model for oral exposure to the herbicide atrazine in the adult male C57BL/6 mouse. The third Annual University of Georgia-College of Veterinary Medicine Research Day. Athens, GA. (October 14, 2010)
97. **Lin Z**, Dodd CA, Georgieva II, Filipov NM. Adverse effects of atrazine and its main metabolite diaminochlorotriazine on differentiating N27 dopaminergic cells. Annual Meeting of Southeastern Society of Toxicology. Athens, GA. (October 11-12, 2010)
98. **Lin Z**, Fisher JW, Ross MK, Filipov NM. A preliminary PBPK model of atrazine and its main metabolites in mice. The University of Georgia Interdisciplinary Toxicology Program (ITP) Annual Retreat. Athens, GA. (March 3, 2010)

FARAD ANNUAL MEETINGS AND RESPONDER TRAINING PRESENTATIONS

1. **Lin Z**. Annual Progress Report and Future Plan – UF-PBPK Component. Food Animal Residue Avoidance Databank (FARAD) Annual Summit, Austin, Texas. (November 6-8, 2022)
2. **Lin Z**. Annual Progress Report and Future Plan – UF-PBPK Component. Food Animal Residue Avoidance Databank (FARAD) Annual Summit, Virtual via Zoom. (February 10, 2022)
3. **Lin Z**. Methods of Estimating Withdrawal Intervals of Extralabel Drug Uses in Food Animals. Food Animal Residue Avoidance Databank (FARAD) Responder Training Meeting, Virginia-Maryland College of Veterinary Medicine, Blacksburg, VA. (joined the meeting and presented my talk via Zoom Video Conference) (August 12-13, 2021)
4. **Lin Z**. KSU FARAD Annual Progress Report and Future Plan. Food Animal Residue Avoidance Databank (FARAD) Annual Summit, Virtual via Zoom. (October 5-6, 2020)
5. **Lin Z**. KSU FARAD Annual Progress Report and Future Plan. Food Animal Residue Avoidance Databank (FARAD) Annual Summit, Hyatt Regency DFW, Dallas, TX. (September 30 – October 2, 2019)
6. **Lin Z**. Demonstration on how to use tolerance limit methods to calculate withdrawal intervals. Collaborative Research Training Meeting between University of California-Davis and Kansas State University Components of FARAD, (this demonstration was delivered via Zoom Video Conference) (September 23, 2019)
7. **Lin Z**. Principles and methods of estimating withdrawal intervals of drugs after extralabel use in food animals. Food Animal Residue Avoidance Databank (FARAD) Responder Training Meeting,

Virginia-Maryland College of Veterinary Medicine, Blacksburg, VA. (joined the meeting and presented my talk via Zoom Video Conference) (July 25-26, 2019)

8. **Lin Z.** KSU FARAD Annual Progress Report and Future Plan. *Food Animal Residue Avoidance Databank (FARAD) Annual Summit*, Hyatt Regency DFW, Dallas, TX. (May 7-9, 2018)

SEMINAR(S) AND PRESENTATION(S)

1. **Lin Z.** Machine learning and artificial intelligence in toxicology and physiologically based pharmacokinetic modeling in supporting chemical and nanoparticle toxicity and dosimetry assessment. ExxonMobil Biomedical Sciences (EMBSI), External Speaker Webinar. (April 26, 2023)
2. **Lin Z.** Integration of Artificial Intelligence with Physiologically Based Pharmacokinetic Modeling and Its Applications in Cancer Nanomedicine. Invited Seminar, Cancer AI Working Group, UF Health Cancer Center, University of Florida. (November 14, 2022)
3. **Lin Z.** Applications of Physiologically Based Pharmacokinetic (PBPK) Models for Drugs in Cattle, Swine, Goats, Sheep, and Chickens for Animal-Derived Food Safety Assessment. Food Systems Institute (FSI) Graduate Fellows seminar, UF/IFAS. (November 9, 2022)
4. **Lin Z.** Applications of Physiologically Based Pharmacokinetic (PBPK) Modeling in Nanomedicine and Food Safety Assessment and Roles of Artificial Intelligence (AI) Approaches in these Areas. Invited webinar hosted by National Health Research Institutes and National Yang Ming Chiao Tung University of Taiwan. (May 18, 2022) [Link](#).
5. **Lin Z.** *Applications of Physiologically Based Pharmacokinetic (PBPK) Modeling in Toxicology and Veterinary Pharmacology and Roles of Artificial Intelligence (AI) Approaches in these Areas*. Invited seminar, Department of Pharmaceutics, College of Pharmacy, University of Florida, Gainesville, FL. (April 14, 2022)
6. **Lin Z.** Introduction of the Computational Toxicology and Pharmacometrics Laboratory at the University of Florida. Invited presentation, Lake Nona Leadership Council Meeting, Orlando, FL. (April 5, 2022)
7. **Lin Z.** Applications of Physiologically Based Pharmacokinetic (PBPK) Modeling in Nanomedicine, Food Safety and Human Health Risk Assessment and Roles of Artificial Intelligence (AI) Approaches in these Areas. Invited webinar, ScitoVation, Durham, NC. (December 7, 2021) Recording available [here](#)
8. **Lin Z.** *Application of Pharmacometrics in Veterinary Medicine and Translation of Pharmacokinetics/Pharmacodynamics from Animals to Humans*. Invited seminar, Department of Environmental and Global Health, College of Public Health and Health Professions, University of Florida, Gainesville, FL. (September 30, 2021)
9. **Lin Z.** *Applications of Physiologically-Based Pharmacokinetic (PBPK) Models in Nanomedicine, Food Safety and Human Health Risk Assessment and Roles of Artificial Intelligence (AI) in these Areas*. Invited seminar, Department of Environmental and Global Health, College of Public Health and Health Professions, University of Florida, Gainesville, FL. (January 20, 2021)
10. **Lin Z.** *Development and Application of Physiologically-Based Pharmacokinetic (PBPK) Models in Food Safety and Risk Assessment*. Invited seminar, Department of Environmental Health, Harvard T.H. Chan School of Public Health, Boston, MA. (October 30 – November 1, 2019)
11. **Lin Z.** *Application of the Food Animal Residue Avoidance Databank (FARAD) in animal health, human food safety, and animal drug development*. Invited presentation, The Chinese 14th Conference on Veterinary Pharmacology and Toxicology, Qingdao, China. (Highlighted on [K-State Today](#) and [CVM Lifelines](#)) (October 17-20, 2017)

12. **Lin Z.** *Performance assessment and translation of individual or population physiologically based pharmacokinetic models from acsIX to Berkeley Madonna, MATLAB, and R language.* Invited webinar, Society of Toxicology (SOT) Biological Modeling Specialty Section (BMSS). (July 21, 2017)
13. **Lin Z.** *Physiologically based pharmacokinetic modeling: a tool to extrapolate from animals to humans and from cells to organisms.* TED talk, Department of Anatomy and Physiology, Kansas State University, Manhattan, KS. (April 10, 2017)
14. **Lin Z.** *Application of population physiologically based pharmacokinetic (PBPK) models in toxicology.* Invited seminar, Department of Statistics, College of Arts and Sciences, Kansas State University, Manhattan, KS. (February 9, 2017)
15. **Lin Z.** *PBPK modeling of gold nanoparticles: a tool to extrapolate from animals to man.* Invited presentation, 2016 International Nanotoxicology Congress, Boston, MA. (June 1-4, 2016)
16. **Lin Z.** *Integrating experimental and physiologically based pharmacokinetic (PBPK) modeling approaches to evaluate neurotoxicity of the herbicide atrazine across the lifespan.* Invited seminar, Department of Forensic Medicine, School of Basic Medical Science, Southern Medical University, Guangzhou, China. (May 16, 2015)
17. **Lin Z.** *Development and application of a multi-route physiologically based pharmacokinetic model for oxytetracycline in dogs and humans.* Invited presentation, Animal Health Modeling and Simulation Society (AHMSS) Teleconference. (October 28, 2014)
18. **Lin Z.** *A multi-route physiologically based pharmacokinetic model for oxytetracycline in dogs.* Seminar, Department of Anatomy and Physiology, Kansas State University, Manhattan, KS. (April 28, 2014)

MENTORING EXPERIENCE

Postdoctoral Fellow Advisor

2016.08-2019.08

Dr. Miao Li

(Selected as Postdoctoral Representative of the Society of Toxicology Biological Modeling Specialty Section, the Central States Society of Toxicology Regional Chapter, and the Continuing Education Committee of Society of Toxicology; published 5 first-authored manuscripts in *Food and Chemical Toxicology*, *Toxicological Sciences*, *Archives of Toxicology*, and *Journal of Veterinary Pharmacology and Therapeutics*; published 9 co-author papers; published 1 co-authored book chapter; recipient of the SOT Biological Modeling Specialty Section Trainee Award, the Postdoctoral Excellence Award of the Regulatory and Safety Evaluation Specialty Section of SOT in 2018, and the SOT Risk Assessment Specialty Section (RASS) Perry J. Gehring Best Postdoctoral Fellow Award, the AACT and InnoStar Best Abstract Award, and the SOT Biological Modeling Specialty Section Best Trainee Abstract Finalist Award in 2019, as well as the SOT Best Postdoctoral Publication Award in 2020)

First Position: Visiting Scientist, National Center for Toxicological Research (NCTR), US Food and Drug Administration (FDA), Jefferson, AR

2016.12-2020.12

Dr. Yi-Hsien Cheng

(Selected as the Postdoctoral Representative of the Society of Toxicology Biological Modeling Specialty Section in 2019; published 2 first-authored manuscript in *Nanotoxicology* and *ACS Nano*; published 3 co-authored manuscripts; published 1 co-authored book chapter; recipient of the Risk Assessment Specialty Section and Biological Modeling Specialty Section of SOT for the Andersen-Clewell Trainee Award, the Top 10 Best Risk-assessment

Related Abstracts by the Risk Assessment Specialty Section of SOT, the Outstanding Postdoctoral Award of the Nanotoxicology Specialty Section of SOT, and the SOT Biological Modeling Specialty Section Perry J. Gehring Biological Modeling Endowment Award in 2018, as well as the SOT Regulatory and Safety Evaluation Specialty Section (RSESS) Postdoctoral Excellence Award and the Biological Modeling Specialty Section Best Trainee Abstract Finalist Award in 2019)

First Position: Pharmacologist/Biopharmaceutical Scientist – Investigator III, Division of Quantitative Methods and Modeling (DQMM), Office of Generic Drugs (OGD), Center for Drug Evaluation and Research (CDER), US Food and Drug Administration (FDA), Silver Spring, MD

2018.08-2021.05

Dr. Wei-Chun Chou

(Published 3 first-authored manuscripts in *Environment International* (2) and *Environmental Health Perspectives* (1); published 1 co-authored paper; published 1 co-authored book chapter; recipient of the SOT Biological Modeling Specialty Section (BMSS) Andersen-Clewell Trainee Award and the SOT Regulatory and Safety Evaluation Specialty Section (RSESS) Postdoctoral Excellence Award in 2019, and the Best Paper Award of SOT BMSS in 2020, as well as the Outstanding Postdoctoral Award of Nanoscience and Advanced Materials Specialty Section and the AACT InnoStar Best Abstract Award (3rd Place) of Society of Toxicology in 2021)

First Position: Research Assistant Professor, Department of Environmental and Global Health, College of Public Health and Health Professions, University of Florida

2020.09-2021.10

Dr. Md Mahbubul Huq Riad (recipient of Andersen-Clewell Trainee Award of Biological Modeling Specialty Section and Risk Assessment Specialty Section of Society of Toxicology in 2021; published 1 paper in *Toxicological Sciences*)

First Position: Senior Quantitative Systems Pharmacologist I, AbbVie, Inc.

2020.09-2022.08

Dr. Long Yuan (recipient of John Doull Risk Assessment Award presented by Risk Assessment Specialty Section of Society of Toxicology in 2021 and the Andersen-Clewell Trainee Award jointly presented by Biological Modeling Specialty Section and Risk Assessment Specialty Section of Society of Toxicology in 2022; published 1 paper in *Regulatory Toxicology and Pharmacology* and 1 paper in *Food and Chemical Toxicology*)

First Position: Senior Scientist in Pharmacometrics in Neurocrine Biosciences, Inc.

2021.01-present

Dr. Qiran Chen (recipient of the Society of Toxicology Biological Modeling Specialty Section Perry Gehring Biological Modeling Endowment Award and the Andersen-Clewell Trainee Award (Honorable Mention) of Biological Modeling Specialty Section and Risk Assessment Specialty Section of Society of Toxicology in 2022; recipient of the Best Postdoctoral Publication Award presented by Society of Toxicology and the Outstanding Postdoctoral Award by Nanoscience and Advanced Materials Specialty Section in 2023; published 1 paper in *Environmental Science & Technology* and 1 paper in *WIREs Nanomedicine and Nanobiotechnology*)

2022.10-present

Dr. Malek Hussein Hajjawi

2023.06-present Dr. Chi-Yun Chen

Visiting Student/Scholar Advisor

- 2016.10-2017.10 Dongping Zeng
(Recipient of the Chinese Government Scholarship, No. 201508440454; Published 3 first-author papers: 2 in *Journal of Agricultural and Food Chemistry* and 1 in *Frontiers in Microbiology*; published 1 co-authored manuscript)
First Position: Associate Professor, South China Agricultural University, Guangzhou
- 2017.02-2017.03 Paula Solar Oliver
First Position: Executive Director at the Chilean Council of Foresight and Strategy
- 2018.12-2019.12 Ning Xu
(Recipient of the Chinese Government Scholarship, No. 201803260013; published 3 first-authored manuscripts: 1 in *Aquaculture* and 2 in *Food and Chemical Toxicology*)
First Position: Assistant Researcher, Chinese Academy of Fishery Sciences, Wuhan
- 2019.07-2020.02 Yi-Jun Lin
(Published 2 first-authored manuscripts in *Journal of Agricultural and Food Chemistry* and *Journal of Hazardous Materials*)
First Position: Assistant Professor, National Yang-Ming University, Taiwan
- 2021.07-2021.08 Gabriel (Guanyu) Tao
(Published 1 first-authored PBPK manuscript; recipient of a 2022 Predoctoral Fellowship in Drug Discovery from the Pharmaceutical Research and Manufacturers of America Foundation [PhRMA Foundation])
First Position: Senior Scientist, ADME & Discovery Toxicology Group, Merck, Boston, MA

Undergraduate Student Advisor

- 2016.08-2018.05 Trevor Elwell-Cuddy (Major: Biology)
(Recipient of the Kansas State University OURCI Award for spring 2017, the Most Promising Student Award in Division of Biology at K-State in 2017, and the Society of Toxicology (SOT) Committee on Diversity (CDI) Undergraduate Travel Award; published 1 first-author paper in *Journal of Veterinary Pharmacology and Therapeutics*; published 1 co-authored paper; graduated with a Bachelor degree with honors)
First Position: PBPK modeler in the Wright–Patterson Air Force Base
Current: Medical student at the University of Kansas School of Medicine
- 2018.01-2018.06 Sichao Mao (Pre-Vet student; Major: Animal Science)
(First-author of a poster presentation in the 2018 CSSOT meeting)
First Position: DVM student at Iowa State University
- 2018.01-2018.06 Yilei Zheng (Pre-Vet student; Major: Animal Science)
(First-author of a poster presentation in the 2018 CSSOT meeting)
First Position: DVM student at University of Minnesota
- 2018.06-2019.05 Yu-Shin Wang (Pre-Vet student; Major: Animal Science)
(Presented a poster in the 2018 CSSOT meeting and won the Outstanding Poster Presentation Award)

First Position: DVM student at Kansas State University

2019.10-2020.05 Jake Willson (Major: Computer Science)
(Completed a Database on Physiological Parameters in Food-Producing Animals)
First Position: Software Engineer, Cerner, Kansas City, MO

DVM Student Advisor

2019.08-2020.11 Yu Shin Wang (Joined my lab in 2018.06 when she was an undergraduate)
(Published 1 first-author paper in *Journal of Veterinary Pharmacology and Therapeutics*; published 2 co-authored papers)

Junior Faculty Advisor

2021.05-present Wei-Chun Chou

Dissertation Committee Member at K-State

Fall 2012-Spring 2018 Weijia Jia, PhD in Statistics (Advisor: Weixing Song)

Fall 2016-Fall 2018 Michael Kleinhenz, PhD in Pharmacology (transferred from Iowa State University to KSU; Advisor: Johann (Hans) Coetzee)

Fall 2015-Spring 2019 Amber Logan, MS in Veterinary Biomedical Science (Advisor: Paige Adams)

Spring 2018-Fall 2019 Joshua Staley, MS in Veterinary Biomedical Science (Advisor: Gerald Wyckoff)

Fall 2017-Fall 2020 Elza Mathew, PhD in Physiology (Advisor: Robert DeLong)

Spring 2018-present Jason Flavin, MS in Veterinary Biomedical Science (Advisor: Paige Adams)

Spring 2017-Spring 2022 Kanwal Ayub, PhD in Statistics (Advisor: Weixing Song)

Dissertation Committee Member at UF

Fall 2021-present Katelyn Flaherty, PhD in Environmental and Global Health (Advisors: Torben Becker and Eric Nelson)

Fall 2022-present Yi-Hua Chiang, PhD in Pharmaceutics (Advisor: Abhisheak Sharma)

Fall 2022-present Cameron Humerickhouse, PhD in Pharmaceutics (Advisor: Stephan Schmidt)

PhD Student Advisor at UF

Fall 2022-present Xue Wu, PhD in Public Health with a Concentration in Environmental Health
(Recipient of the Perry J. Gehring Biological Modeling Endowment Award in 2023
Society of Toxicology meeting)

Spring 2023-present Pei-Yu Wu, PhD in Public Health with a Concentration in Environmental Health

Fall 2023-present Zhicheng Zhang, PhD in Public Health with a Concentration in Environmental Health

MS Student Advisor at UF

Fall 2021-present Michelle Hazlett, Master of Health Science (MHS) in One Health

Spring 2022-present Kristie Wilkins, Master of Health Science (MHS) in One Health

Fall 2022-present Sherry-Anne R. Ash, Master of Health Science (MHS) in One Health

Fall 2022-present JaLeesa Robinson, Master of Public Health (MPH) in Environmental Health

Fall 2022-present Bushra Syed, Master of Public Health (MPH) in Environmental Health

Fall 2022-present Kenny Moise, Master of Public Health (MPH) in Environmental Health

MS Student Research Assistant Advisor at UF

Summer 2023-present Yashas Kuchimanchi, MS in Computer Science

Summer 2023-present Venkata Nithin Kamineni, MS in Computer Science

TEACHING EXPERIENCE

2023 Spring: Course coordinator and instructor; Course title: Artificial Intelligence in Toxicology and Environmental Health; Course #: PHC 6937. Credit hours: 3. Co-Instructor: Dr. Wei-Chun Chou. University of Florida.

2023 Spring: Guest Lecturer; Lecture title: Integrating Physiologically Based Pharmacokinetic (PBPK) Modeling with Artificial Intelligence (AI) to Predict Nanoparticle Delivery to Tumors; Course title: Targeted Drug Delivery Systems; Course #: IPP 250; Course Coordinator: Dr. Vivek Gupta. St. John's University.

2023 Spring: Guest Lecturer; Lecture title: Xenobiotic transport in the body – Physiologically based pharmacokinetic (PBPK) modeling; Course title: Ecotoxicology and Risk Assessment; Course #: VME 6934; Course Coordinator: Dr. Nancy Denslow. University of Florida.

2022 Fall: Course coordinator and instructor; Course title: Physiologically based pharmacokinetic modeling in toxicology and risk assessment; Course #: PHC 6937. Credit hours: 3. Co-Instructor: Dr. Wei-Chun Chou. Guest Lecturers: Dr. Jeffrey W. Fisher, Dr. Melvin E. Andersen, Dr. Raymond S. H. Yang, and Dr. Robert DeWoskin, Dr. Miao Li. Teaching Assistant: Dr. Qiran Chen. University of Florida.

2022 Fall: Guest Lecturer; Lecture title: Use cases of machine learning and artificial intelligence in toxicology; Course title: Higher Thinking for Healthy Humans: AI in Healthcare and Public Health; Course #: PHC 3793; Course Coordinator: Dr. Aprinda Indahlastari. University of Florida.

2022 Spring: Guest Lecturer; Lecture title: Integration of physiologically based pharmacokinetic modeling with machine learning and its role in toxicology; Course title: Public Health Research Methods; Course #: PHC 6715; Course Coordinator: Dr. Andy Kane. University of Florida.

2022 Spring: Guest Lecturer; Lecture title: Physiologically based pharmacokinetic (PBPK) modeling in epidemiology; Course title: Environmental Monitoring and Exposure Assessment; Course #: PHC 6702; Course Coordinator: Dr. Eric Coker. University of Florida.

2022 Spring: Guest Lecturer; Lecture title: Xenobiotic transport in the body – Physiologically based pharmacokinetic (PBPK) modeling; Course title: Ecotoxicology and Risk Assessment; Course #: VME 6934; Course Coordinator: Dr. Nancy Denslow. University of Florida.

2021 Fall: Guest Lecturer; Lecture title: Physiologically-Based Pharmacokinetic Models; Course title: Pharmacokinetics; Course #: CBS 788; Course Coordinator: Dr. Ronald E. Baynes. North Carolina State University.

2021 Spring: Course coordinator and instructor; Course title: Physiologically based pharmacokinetic modeling (PBPK modeling); Course #: AP 873. Credit hours: 4. Guest Lecturers: Dr. Jeffrey W. Fisher, Dr. Melvin E. Andersen, Dr. Raymond S. H. Yang, and Dr. Robert DeWoskin, Dr. Miao Li, Dr. Yi-Hsien Cheng. Teaching Assistant: Dr. Wei-Chun Chou. Kansas State University.

2020 Fall: Course coordinator and instructor; Course title: Basic and Applied Pharmacokinetics; Course #: AP 788. Credit hours: 3. Guest Lecturer: Dr. Mengjie Li. Kansas State University.

2020 Spring: Course coordinator and instructor; Course title: Physiologically based pharmacokinetic modeling (PBPK modeling); Course #: AP 873. Credit hours: 4. Guest Lecturers: Dr. Jeffrey W. Fisher, Dr. Melvin E. Andersen, Dr. Raymond S. H. Yang, and Dr. Robert DeWoskin, Dr. Miao Li, Dr. Yi-Hsien Cheng. Kansas State University.

2019 Spring: Course coordinator and instructor; Course title: Physiologically based pharmacokinetic modeling (PBPK modeling); Course #: AP 873. Credit hours: 4. Guest Lecturers: Dr. Jeffrey W. Fisher, Dr. Raymond S. H. Yang, and Dr. Robert DeWoskin, Dr. Miao Li, Dr. Yi-Hsien Cheng. Teaching Assistant: Dr. Miao Li. Kansas State University.

2018 Fall: Course coordinator and instructor; Course title: Basic and Applied Pharmacokinetics; Course #: AP 790 (changed to permanent # AP 788). Credit hours: 3. Guest Lecturer: Dr. Mengjie Li. Kansas State University.

2018 Spring: Course coordinator and instructor; Course title: Physiologically based pharmacokinetic modeling (PBPK modeling); Course #: AP 873. Credit hours: 4. Guest Lecturers: Dr. Jeffrey W. Fisher and Dr. Raymond S. H. Yang, Dr. Miao Li, Dr. Yi-Hsien Cheng. Teaching Assistants: Dr. Miao Li and Dr. Yi-Hsien Cheng. Kansas State University.

2017.10: Organized a workshop on physiologically based pharmacokinetic modeling (PBPK modeling) in Department of Veterinary Pharmacology and Toxicology, College of Veterinary Medicine, Huazhong Agricultural University, Wuhan, China. (Highlighted on [K-State Today](#) and [CVM Lifelines](#))

2017 Spring: Course coordinator and instructor; Course title: Physiologically based pharmacokinetic modeling (PBPK modeling); Course #: AP 873. Credit hours: 4. Guest Lecturers: Dr. Jeffrey W. Fisher and Dr. Raymond S. H. Yang. Kansas State University.

2016 Fall: Course lecturer; Course title: Integration I – Perspectives in veterinary/biomedical research; Course #: AP 730; Lecture title: Applications of Physiologically Based Pharmacokinetic (PBPK) Modeling in Risk Assessment and Veterinary Medicine. Kansas State University.

2013 Fall: Course lecturer; Course title: Orientation to Environmental Health Science; Course #: EHSC 2020; Lecture title: Developmental neurotoxicity and tissue dosimetry of the pesticide atrazine. Department of Environmental Health Science, College of Public Health, The University of Georgia, Athens, GA.

GRANT SUPPORT

Active

1. NIH/NIBIB Grant #: R01EB031022. PI: **Zhoumeng Lin**; Co-I: Santosh Aryal. Development of a web-based predictive model of nanoparticle delivery to tumors by integrating physiologically-based pharmacokinetic modeling with artificial intelligence. Requested amount: \$1,523,923. Awarded amount: \$1,371,531. Period: 09/01/2021-05/31/2025. [Featured at [UF PPHP](#)]
2. USDA/NIFA Award #: 2022-41480-38137. PI: Fiona M. Maunsell. Co-PI: **Zhoumeng Lin**. FARAD – Food Animal Residue Avoidance Databank Program – University of Florida Component. Total cost: \$448,000. Period: 09/01/2022-08/31/2023.
3. USDA/NIFA Award #: 2021-41480-35271. PI: Fiona M. Maunsell. Co-PI: **Zhoumeng Lin**. FARAD – Food Animal Residue Avoidance Databank Program – University of Florida Component. Total cost: \$448,000. Period: 09/01/2021-08/31/2023. (Year 2 is no-cost extension)

4. USDA/NIFA Award #: 2020-41480-32497. PI: **Zhoumeng Lin**. Co-PI: Majid Jaber-Douraki. Food Animal Residue Avoidance Databank (FARAD). Total cost: \$340,000. Period: 09/01/2020-08/31/2023. (Years 2 and 3 are no-cost extension)
5. USDA/NIFA Award #: 2021-67015-34084. PI: Abbie Viscardi; Co-PI: Johann (Hans) Coetzee, **Zhoumeng Lin**, Michael Kleinhenz. Evaluation of Oral Firocoxib, Administered to the Sow and Delivered Transmammary to Piglets, to Alleviate Pain in Swine. Requested total amount: \$496,799. Awarded total amount: \$500,000. Requested period: 04/01/2021-03/31/2024. Awarded period: 07/01/2021-06/30/2024.
6. USDA/NIFA. Award #: 2020-67015-31456. PI: Michael Kleinhenz. Co-PIs: Emily Reppert, Abbie Viscardi, **Zhoumeng Lin**, Johann Coetzee, and Alison Crane. Optimization of analgesic drug regimens for goats with lameness. Total cost: \$496,000. Period: 08/01/2020-07/31/2023.

Pending

1. PPHP PhD Fellowship in Artificial Intelligence. Title: An Artificial Intelligence-Based Quantitative Structure-Activity Relationship (QSAR) Model to Predict the Plasma Half-life of Drugs in Food Animals. Student name: Xue Wu. PI/Mentor: **Zhoumeng Lin**. Co-Is: Lisa Tell and Fiona Maunsell. Requested amount: \$29,300. Requested period: 08/16/2023-08/15/2024. Submitted May 2023.
2. NIH/NSF P01 Center Grant Proposal. Title: Guiding Advancements in Toxicants and Oceans Research (GATOR). PD/PI: Tara Sabo-Attwood. Co-PD/PI: Maitane Olabarrieta Lizaso. **My role: PI of Project 4**. Project 4 Title: Employ AI-based pharmacokinetic modeling to predict human health risks and develop seafood safety recommendations related to PFAS under different climate change scenarios. Requested amount for the entire center proposal: \$7,083,479. Requested amount for Project 4: \$804,419. Period: 12/1/2023-11/30/2028. Submitted November 2022.
3. NIH/NIEHS R01. MPIs: **Zhoumeng Lin (contact)**, Andre Gesquiere, Santosh Aryal. Co-Is: Wei-Chun Chou, Chunla He. Prediction of tissue and cellular dosimetry and toxicity of nanomaterials through an artificial intelligence enabled physiologically-based pharmacokinetic web visualization platform. Requested amount: \$2,545,540. Period: 09/01/2023-08/31/2028. Submitted February 2023.
4. NIH/NIEHS R01. PI: **Zhoumeng Lin**. Co-Is: Wei-Chun Chou, Christopher Vulpe, Abhishek Sharma, Chunla He, Bruno Hagenbuch (University of Kansas Medical Center), Marc-Andre Verner (University of Montreal). Methods for exposure, response, and risk assessments of mixtures of per- and polyfluoroalkyl substances (PFAS) using artificial intelligence-assisted physiologically-based pharmacokinetic modeling. Requested amount: \$2,178,489. Period: 01/01/2024-12/31/2028. Resubmitted March 2023.

Completed

1. Subcontract from Children's Hospital of Philadelphia (CHOP) at the University of Pennsylvania. Identifying efficient sampling interval to effectively construct time-concentration profile of bisphenol A in the infant's urine using a PBPK model. PI: Eric Coker. Co-PI: **Zhoumeng Lin**. Total amount: \$17,001. Period: 09/01/2021-02/28/2023.
2. USDA/NIFA Parent Award #: 2019-41480-30294. Subaward #: A20-2028-S002. Parent Project: Food Animal Residue Avoidance Databank (UC-Davis Component). Subaward Project: Development of a PBPK model for PFOS in dairy cows. Parent Award PI at UC-Davis: Lisa Tell. Subaward PI at UF: **Zhoumeng Lin**. Total cost: \$96,148. Period: 09/01/2021-08/31/2022.
3. USDA/NIFA Award #: 2019-41480-30296. PI: **Zhoumeng Lin**. Co-PI: Majid Jaber-Douraki. Food Animal Residue Avoidance Databank (FARAD). Total cost: \$340,000. Period: 09/01/2019-08/31/2022. (Years 2 and 3 are no-cost extension)

4. NIH/NIBIB. Grant #: R03EB026045. PI: **Zhoumeng Lin**. Physiologically based pharmacokinetic modeling and analysis of administration route-dependent tissue distribution of gold nanoparticles. Total cost: \$152,000. Period: 09/10/2019-06/30/2022. (Year 3 is no-cost extension)
5. USDA/NIFA. Award #: 2020-67030-31479. PI: Johann Coetzee. Co-PIs: Jason Griffin, Geraldine Magnin, **Zhoumeng Lin**, and Michael Kleinhenz. Establishing the pharmacokinetics and tissue residue depletion of cannabinoids in livestock after exposure to industrial hemp. Total cost: \$200,000. Period: 06/01/2020-05/31/2022.
6. NIH T35 VRSP program. Grant #: T35OD029981. PI: Bruce Schultz (contact). MPI and Co-Director: Katherine Stenske KuKanich. **My role**: I serve as one of the Mentors. Short term training in health professional schools. Total amount: \$318,815. Period: 07/01/2020-06/30/2025.
7. USDA/NIFA Award #: 2018-41480-28805. PI: **Zhoumeng Lin**. Co-PI: Majid Jaber-Douraki. Food Animal Residue Avoidance Databank (FARAD). Total cost: \$340,000. Period: 09/01/2018-08/31/2021. (Years 2 and 3 are no-cost extension)
8. NIH/NIBIB. Grant #: R03EB025566. PI: **Zhoumeng Lin**. Co-I: Robert DeLong. Physiologically based pharmacokinetic modeling and analysis of nanoparticle delivery to tumors. Total cost: \$152,000. Period: 09/10/2017-08/31/2020. (Year 3 is no-cost extension)
9. USDA/NIFA Award #: 2017-68003-26499. Mitigation of Fluoroquinolone-resistant *Campylobacter* in Cattle (sub-award to Kansas State University). PI: Anthony J. Tarpoff. Co-PIs: Johann F. Coetzee, **Zhoumeng Lin**. Total cost of the sub-award: \$169,083. Period: 06/01/2017-05/31/2021. (Year 4 is no-cost extension)
10. USDA/NIFA Award #: 2017-41480-27310. PI: **Zhoumeng Lin**. Food Animal Residue Avoidance Databank (FARAD). Total cost: \$100,000. Period: 09/01/2017-08/31/2020. (Years 2 and 3 are no-cost extension).
11. American Association of Swine Veterinarians (AASV) Foundation Grant. Award #: A00-1103-001. PI: Johann (Hans) Coetzee; Co-Investigators: Geraldine Magnin, **Zhoumeng Lin**, Michael Kleinhenz. "Investigating the plasma pharmacokinetics and tissue residues of oral firocoxib following transmammary delivery from sows to piglets". Requested amount: \$29,970. Awarded amount: \$10,300. Period: 08/01/2019 to 07/31/2020.
12. USDA/NIFA Award #: 2016-41480-25729. Original PI: Ronette Gehring; Original Co-PIs: Jim E. Riviere, **Zhoumeng Lin**, Majid Jaber-Douraki. Food Animal Residue Avoidance Databank (FARAD). Total cost: \$360,000. Period: 09/01/2016-08/31/2019. (PI name was transferred to Zhoumeng Lin in November, 2017; Years 2 and 3 were no-cost extension).
13. Kansas State University Mark Derrick Canine Research Fund. PI: Kate KuKanich; Co-Is: Butch KuKanich, **Zhoumeng Lin**, Amy Rankin. "Population Pharmacokinetics and Clinical Efficacy of Fluconazole in Dogs with Fungal Disease". Direct cost: \$8,330. Period: 08/01/2016 – 07/31/2019.
14. K-State College of Veterinary Medicine Intramural Grant, Success For Young Investigators (SUCCESS-FYI) Program. PI: **Zhoumeng Lin**. Development and application of a preliminary physiologically based pharmacokinetic model to determine the role of lymphatic system on delivery of gold nanoparticles to tumors in mice. Direct cost: \$15,000. Period: 11/01/2017-12/31/2018.
15. USDA/NIFA Award #: 2015-41480-23972. Original PI: Jim E. Riviere; Original Co-PI: Ronette Gehring. Food Animal Residue Avoidance Databank (FARAD). Total cost: \$396,000. Period: 09/01/2015-08/31/2018. (PI name was transferred to Zhoumeng Lin in November, 2017).
16. Kansas State University Global Campus Internal Grant Program. PI: Ronette Gehring; Co-PIs: Jeffrey Comer, Majid Jaber-Douraki, **Zhoumeng Lin**, Victoriya Volkova. "Development of a Full Offering of Online Courses in Computational Comparative Medicine". Direct cost: \$17,800. Period: 09/01/2016-08/31/2017.

17. Kansas State University Office of the Provost K-State Mentoring Fellowship. PI: **Zhoumeng Lin**. "An Integrative In Vitro and In Vivo Dosimetry Model for Engineered Nanomaterials". Direct cost: \$6,000. Period: 05/01/2016 – 12/31/2017.
18. Kansas State University Office of Research and Sponsored Programs (ORSP) University Small Research Grant (USRG). PI: **Zhoumeng Lin**. "Developing a Computer Model to Improve Pain Treatment in Dogs Using Existing Data". Direct cost: \$4,343. Period: 07/01/2016 to 12/31/2017.

Unfunded Proposals

1. NIH/NIEHS R01. PI: **Zhoumeng Lin**. Co-Is: Wei-Chun Chou, Yang Yang, Chunla He, Scott M. Bartell (UC-Irvine), Marc-André Verner (Uni. Of Montreal). Quantitative methods for exposure and risk assessments of mixtures of per- and polyfluoroalkyl substances (PFAS) using artificial intelligence-assisted physiologically-based pharmacokinetic modeling. Requested amount: \$1,441,147. Period: 04/01/2023-03/31/2027. Submitted June 2022. (Updated in November 2022, Impact Score: 51; Percentile: 47)
2. NIH/NIEHS R01. PI: **Zhoumeng Lin**. Co-Is: Wei-Chun Chou, Scott M. Bartell (UC-Irvine), Cen Wu (K-State). Methods for exposure, response, and risk assessments of mixtures of per- and polyfluoroalkyl substances (PFAS) using artificial intelligence-assisted physiologically-based pharmacokinetic modeling. Requested amount: \$1,479,333. Period: 07/01/2022-06/30/2026. Submitted September 2021. (Update in April 2022, Impact Score: 54; Percentile: 49)
3. NIH/NIEHS R01. MPIs: **Zhoumeng Lin (contact)**, Andre Gesquiere, Santosh Aryal. Co-I: Wei-Chun Chou. Development of a web-based model to predict tissue and cellular distribution and toxicity of nanomaterials through an integrative in vitro and physiologically-based pharmacokinetic in silico platform. Requested amount: \$2,454,204. Period: 07/01/2022-06/30/2027. Resubmitted November 2021. (Update in March 2022, Impact Score: 42; Percentile: 31)
4. NIH/NIEHS R01. MPIs: **Zhoumeng Lin (contact)**, Andre Gesquiere, Santosh Aryal. Development of a web-based model to predict tissue and cellular distribution and toxicity of nanomaterials through an integrative in vitro and physiologically-based pharmacokinetic in silico platform. Requested amount: \$2,351,848. Period: 09/01/2021-08/31/2026. Submitted February 2021. (Update in June 2021: Impact Score: 43; Percentile: 29%)
5. NIH/NIEHS R01. PI: **Zhoumeng Lin**. Co-I: Cen Wu. Methods for exposure, response, and risk assessments of mixtures of per- and polyfluoroalkyl substances (PFAS) in the 21st century. Requested amount: \$1,119,035. Period: 12/01/2021-11/30/2024. Resubmitted February 2021. (Update in July 2021: Impact Score: 47; Percentile: 38%)
6. American Association of Bovine Practitioners (AABP) Foundation Grant. PI: Michael Kleinhenz; Co-Is: Abbie Viscardi, Geraldine Magnin, **Zhoumeng Lin**, Johann (Hans) Coetzee. Determination of milk concentrations and pharmacokinetics of acetylsalicylic acid (aspirin) in lactating dairy cows. Requested amount: \$18,133. Period: 08/01/2021-07/31/2022. Submitted December 2020.
7. NIH/NCI Predoctoral to Postdoctoral Fellow Transition Award (F99/K00). PI: Guanyu (Gabriel) Tao (University of Houston). Sponsor: Romi Ghose. Co-Sponsor: Bhagavatula Moorthy. **My role:** Collaborator. Targeting intestinal drug metabolism to improve the safety of chemotherapy for colorectal cancer. Requested amount: \$377,282. Period: 08/01/2021-07/31/2027. Submitted November 2020.
8. NIH/NIEHS R01. PI: **Zhoumeng Lin**. Methods for exposure, response, and risk assessments of mixtures of per- and polyfluoroalkyl substances (PFAS) in the 21st century. Requested amount: \$1,119,905. Period: 04/01/2021-03/31/2024. Submitted June 2020. (Update in December 2020: Impact Score: 38; Percentile: 26%)
9. NIH/NIEHS R01. PI: Andre Gesquiere (University of Central Florida). **My role:** Co-I of the overall proposal and PI of the subcontract to KSU. IVIVE computational model to predict tissue and cellular

distribution of nanomaterials through an integrated in vitro and in silico platform. Requested amount of the entire proposal: \$1,874,835. Requested amount of the subaward to KSU: \$512,534. Period: 04/01/2021-03/31/2026. Submitted June 2020.

10. American Veterinary Medical Association Foundation. PI: Michael Kleinhenz. Co-Is: Emily Reppert, Johann Coetzee, **Zhoumeng Lin**, and Geraldine Magnin. The pharmacology and analgesic effects of oral carprofen in meat goats. Requested amount: \$29,145. Period: 11/15/2019-11/14/2020. Submitted September 2019.
11. Hemp Feed Coalition. PI: Michael Kleinhenz. Co-Is: Johann Coetzee, Jason Woodworth, **Zhoumeng Lin**, and Geraldine Magnin. Tissue kinetics of cannabinoids in swine following feeding of hemp seed cake. Requested amount: \$60,344. Period: 01/01/2020-12/31/2020. Submitted August 2019.
12. NIH. PI: Andre Gesquiere (University of Central Florida). Co-I: **Zhoumeng Lin**. Nano-PREDICTIVE: An IVIVE approach to nanomaterial dosimetry and nanotoxicity through an integrated in-vitro and in-silico platform. Requested amount: \$1,877,101. Period: 02/01/2020-01/31/2025. (I am responsible for a subcontract for Aim 3 of this proposal to K-State. The requested amount for this subcontract is \$627,281.) Submitted June 2019.
13. IRCN R01. MPI: Robert DeLong (contact), Santosh Aryal. Co-Is: Mary Higginbotham, **Zhoumeng Lin**, Raelene Wouda, Sarah Schneider, Om Prakash, Majid Jaber-Douraki, Seong-O Choi, Jeffrey Comer, and Steve Ensley. RAS/RBD targeted gene, RNA editor and protein interference delivery by physiologically-based anticancer zinc, magnesium or iron oxide nanoparticle. Requested amount: \$1,853,371. Period: 04/01/2020-03/31/2025. Submitted May 2019.
14. KSU Johnson Cancer Research Center, Center of Excellence Award. PI: Robert DeLong. Co-PIs: Santosh Aryal, Ryan J. Rafferty, Majid Jaber-Douraki, Raelene Wouda, **Zhoumeng Lin**, Jeffrey Comer, Mary Lynn Higginbotham, Sarah Schneider, Seong-O Choi. Project title: "Center of Excellence for: Computational and Comparative Nanomedicine". Requested amount: \$100,000. Period: 2019-2021. Submitted March 2019.
15. FDA. Dual PIs: Majid Jaber-Douraki (contact) and **Zhoumeng Lin**. Implementing and validating the open-source BioSimulator for virtual bioequivalence trial simulations in adults and children using population physiologically-based pharmacokinetic models. Requested amount: \$599,816. Period: 09/01/2018-08/31/2020. Submitted June 2018.
16. NIH/NCI R01. MPI: Robert DeLong (contact), Edward Harris (Univ. Nebraska, Lincoln), Kartik Ghosh (Missouri State Univ.). Co-Is: **Zhoumeng Lin**, Mary Higginbotham, Majid Jaber-Douraki, Daniel Davis (Univ. of Missouri). Multi-physiological metal oxide composites for improved metastasis delivery and antimetastatic activity. Requested amount: \$2,296,578. Period: 04/01/2019-03/31/2024. Submitted May 2018.
17. NIH T35. PI: Bruce Schultz. Co-Directors: Beth Davis, Thu Annelise Nguyen. **My role**: Mentor. Short term training in health professional schools. Requested amount: \$269,550. Period: 04/01/2019-03/31/2024. Submitted May 2018.
18. KSU Johnson Cancer Research Center. PI: Robert DeLong. Co-PIs: Ryan J. Rafferty, Jeffrey Comer, Mary Lynn Higginbotham, **Zhoumeng Lin**, Geraldine Magnin, Santosh Aryal. Center for Excellence: Translational Anticancer Drug Design and Delivery. Requested amount: \$100,000. Period: 2018-2020. Submitted March 2018.
19. NIH/NIBIB Trailblazer R21. PI: **Zhoumeng Lin**. Co-Is: Robert DeLong, Masaaki Tamura. Integrating nanoparticle distribution and tumor delivery from physiologically-based global analysis to real-time pharmacokinetic profiling. Requested amount: \$559,755. Period: 07/01/2018-06/30/2021. Submitted October 2017.
20. American Veterinary Medical Foundation (AVMF) Pharmacology Research Program. PI: Laurel Redding. Co-I: **Zhoumeng Lin**. Physiologically-based pharmacokinetic modeling of penicillin G in

dairy calves. Requested amount: \$7,742.74. Period: 01/01/2018-12/31/2019. Submitted September 2017.

21. USDA NIFA. PI: Laurel Redding (Univ. of Pennsylvania). Co-PIs: Dipti Pitta (UPENN), **Zhoumeng Lin**. Antibiotic residue levels in waste milk and effects of feeding residues to pre-weaned calves on the fecal microbiome and resistome. Requested amount: \$481,015. Period: 01/01/2018-12/31/2020. Submitted June 2017.
22. NIH R03. PI: Robert DeLong. Co-Is: **Zhoumeng Lin**, Mary Higginbotham. Towards a multi-nodal nanobioconjugate composite with metastasis delivery and anti-metastatic activity in a pre-clinical metastasis model. Requested amount: \$152,000. Period: 04/01/2018-03/31/2020. Submitted June 2017.
23. USDA NIFA. PI: Victoriya Volkova. Co-PIs: Michael Tokach, Butch KuKanich, **Zhoumeng Lin**, Tiruvor G. Nagaraja, Raghavendra Amachawadi, Hendrik den Bakker, H. Morgan Scott. Effective resistance mitigation by pairing administration route to antimicrobial drug. Requested amount: \$1,199,966. Period: 01/01/2018-12/31/2020. Submitted June 2017.
24. NIH R33. PI: Robert DeLong. Co-Is: **Zhoumeng Lin**, Kyoungju Choi, Mary Higginbotham. Combinatorial nanobiotechnology: a new approach to accelerate discovery and pre-clinical validation of anticancer nanoparticle-RNA-protein conjugates. Requested amount: \$618,256. Period: 09/01/2017-08/31/2019. Submitted May 2017.
25. US FDA BAA program. PI: **Zhoumeng Lin**. Co-PI: Majid Jaber-Douraki. Unraveling robust optimization algorithms for parameter estimation against population or individual datasets in PBPK models for drugs and nanomaterials. Requested amount: \$599,782. Period: 10/1/2017-09/30/2020. Submitted March 2017.
26. NSF NRT. PI: Shing I Chang. Co-PIs: Majid Jaber-Douraki, **Zhoumeng Lin**, Mary Cain, Dave Thompson. Senior Personnel: Kimberly Kirkpatrick, Andy Bennett, Heather Bailey, William Hsu. NRT-UtB: Cohort-Based Traineeship for Transdisciplinary Brain Modeling. Requested amount: \$2,999,725. Period: 10/01/2017-09/30/2022. Submitted February 2017.
27. NSF DMS. Dual PIs: Majid Jaber-Douraki (contact), **Zhoumeng Lin**. Integrating mathematical, statistical, physiologically-based modeling and experimental approaches to study nanomaterial interaction with cells and within the body. Requested amount: \$599,558. Period: 07/01/2017-06/30/2020. Submitted November 2016.
28. NIH R01. Dual PIs: **Zhoumeng Lin** (contact), Majid Jaber-Douraki. Computational comparative exposure and risk assessment of nanomaterials using an integrative in vitro to in vivo extrapolation paradigm. Requested amount: \$1,851,391. Period: 07/01/2017-06/30/2022. Submitted October 2016.
29. US FDA. Dual PIs: **Zhoumeng Lin** (contact), Majid Jaber-Douraki. Unraveling robust optimization algorithms for parameter estimation against population or individual datasets in PBPK models for drugs and nanomaterials. Requested amount: \$498,230. Period: 10/17/2016-10/16/2018. Submitted May 2016.
30. Morris Animal Foundation Pilot Study Grant. PI: **Zhoumeng Lin**; Co-PI: Butch KuKanich. "Developing a Computer Model of Opioid Pharmacokinetics to Improve Pain Treatment in Dogs Using Existing data". Requested amount: \$10,585. Period: 09/01/2016 – 02/28/2017. Submitted March 2016.
31. Morris Animal Foundation Established Investigator Grant. PI: Katherine KuKanich; Co-PI: Butch KuKanich; Co-I: **Zhoumeng Lin**, Amy Rankin. "Population pharmacokinetics and clinical efficacy of fluconazole in dogs and cats with fungal disease". Requested amount: \$25,049. Period: 08/01/2016 – 07/31/2019. Submitted March 2016.

AWARDS, HONORS, AND SCHOLARSHIPS

- 2023 Society of Toxicology Nanoscience and Advanced Materials Specialty Section Best Publication Award of the Year 2022 (First author: Wei-Chun Chou; My role: Advisor and the corresponding author)
- 2022 Society of Toxicology Risk Assessment Specialty Section Best Paper Demonstrating an Application of Risk Assessment Award of the Year 2021 (First author: Wei-Chun Chou; My role: Advisor and the corresponding author)
- 2022 Society of Toxicology Biological Modeling Specialty Section Best Paper Award of the Year 2021 (First author: Wei-Chun Chou; My role: Advisor and the corresponding author)
- 2022 World's Top 2% Scientists based on single-year impact in 2021 (Stanford University based on updated data in September 2022) This list is available here: <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4>
- 2022 JOINN Biomere Outstanding Young Toxicologist Award of AACT, Society of Toxicology American Association of Chinese in Toxicology (AACT) Special Interest Group
- 2021 World's Top 2% Scientists in 2020 (Stanford University based on updated data in August 2021) This list is available here: <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3>
- 2021 Society of Toxicology Biological Modeling Specialty Section Best Paper Award of the year 2020 (Honorable Mention) (First author: Yi-Hsien Cheng; My role: Advisor and the corresponding author)
- 2020 Society of Toxicology Biological Modeling Specialty Section Best Paper Award of the Year 2019 (First author: Wei-Chun Chou; My role: Advisor and the corresponding author)
- 2017 Top Peer Reviewer Award by Publons
- 2016 Society of Toxicology Biological Modeling Specialty Section Best Paper Award of the year 2015 (Honorable Mention)
- 2016 Kansas State University International Collaboration Award for Publication and Creative Work
- 2015 Society of Toxicology American Association of Chinese in Toxicology (AACT) Special Interest Group Best Abstract Award (2nd Place)
- 2014 The National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM) and Physicians Committee for Responsible Medicine (PCRM) Travel Support Award to attend Adverse Outcome Pathways: From Research to Regulation Workshop
- 2014 The University of Georgia Graduate Student Excellence-in-Research Award in Life Sciences
- 2014 The University of Georgia James L. Carmon Honorarium for creatively applying state-of-the-art computational technology in the dissertation research
- 2013 Society of Toxicology Biological Modeling Specialty Section Perry J. Gehring Student Award
- 2013 Society of Toxicology AACT Special Interest Group Best Abstract Award (3rd Place)
- 2013 Society of Toxicology Graduate Student Travel Support Award
- 2013 Southeastern Society of Toxicology Student Platform Presentation Award (2nd Place)
- 2012&2013 The University of Georgia Graduate School National Conference Travel Awards
- 2008 National Merit Scholarship, China Ministry of Education
- 2008 Guangdong Province Modern Higher Education Technology "151 Project" Excellent Project Award (3rd Place), Department of Education of Guangdong Province, China

- 2008 Star of Science and Technology Award, Southern Medical University
- 2008 Science and Technology Innovation Award, Southern Medical University
- 2008 Academic Scholarship (1st Place), Southern Medical University
- 2007 The 9th “Challenge Cup” Guangdong Province College Students’ Extracurricular Academic Works Competition Award (3rd Place), Department of Education of Guangdong Province, China
- 2007 Multimedia Teaching Excellence Award (2nd Place), Southern Medical University
- 2006 Mathematical Modeling Competition Award (3rd Place), Southern Medical University

AWARDS OF MY STUDENTS AND POSTDOCS

- 2023 Society of Toxicology Nanoscience and Advanced Materials Specialty Section Best Publication Award of the Year 2022, Wei-Chun Chou
- 2023 Society of Toxicology Nanoscience and Advanced Materials Specialty Section Outstanding Postdoctoral Award, Qiran Chen
- 2023 Society of Toxicology Best Postdoctoral Publication Award, Qiran Chen
- 2023 Society of Toxicology Biological Modeling Specialty Section Perry J. Gehring Biological Modeling Endowment Award, Xue Wu
- 2023 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Award Honorable Mention, Xue Wu
- 2022 Society of Toxicology Risk Assessment Specialty Section Best Paper Demonstrating an Application of Risk Assessment Award of the Year 2021, Wei-Chun Chou
- 2022 Society of Toxicology Biological Modeling Specialty Section Perry J. Gehring Biological Modeling Endowment Award, Qiran Chen
- 2022 Andersen-Clewell Trainee Award of Biological Modeling Specialty Section and Risk Assessment Specialty Section of Society of Toxicology, Long Yuan
- 2022 Andersen-Clewell Trainee Award (Honorable Mention) of Biological Modeling Specialty Section and Risk Assessment Specialty Section of Society of Toxicology, Qiran Chen
- 2022 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Award Honorable Mentions, Qiran Chen and Long Yuan
- 2021 Southeastern Society of Toxicology (SESOT) Annual Meeting Postdoctoral Fellow Poster Award (1st Prize, Qiran Chen)
- 2021 SESOT Annual Meeting Postdoctoral Fellow Poster Award (2nd Prize, Wei-Chun Chou)
- 2021 SESOT Annual Meeting Postdoctoral Fellow Poster Award (3rd Prize, Long Yuan)
- 2021 Outstanding Postdoctoral Award of Nanoscience and Advanced Materials Specialty Section of Society of Toxicology, Wei-Chun Chou
- 2021 Andersen-Clewell Trainee Award of Biological Modeling Specialty Section and Risk Assessment Specialty Section of Society of Toxicology, Md Mahbubul Huq Riad
- 2021 John Doull Risk Assessment Award, Risk Assessment Specialty Section of Society of Toxicology, Long Yuan
- 2021 AACT InnoStar Best Abstract Award (3rd Place), Society of Toxicology, Wei-Chun Chou
- 2020 Society of Toxicology Biological Modeling Specialty Section Best Paper Award, Wei-Chun Chou

- 2020 Society of Toxicology Best Postdoctoral Publication Award, Miao Li
- 2019 Society of Toxicology Risk Assessment Specialty Section Perry J. Gehring Best Postdoctoral Fellow Award, Miao Li
- 2019 Postdoctoral Excellence Awards of Society of Toxicology Regulatory and Safety Evaluation Specialty Section, Wei-Chun Chou and Yi-Hsien Cheng
- 2019 Andersen-Clewell Trainee Award of Society of Toxicology, Wei-Chun Chou
- 2019 Society of Toxicology American Association of Chinese in Toxicology (AACT) and InnoStar Best Abstract Award (1st Place), Miao Li
- 2019 Society of Toxicology Biological Modeling Specialty Section Best Trainee Abstract Finalist Awards, Miao Li and Yi-Hsien Cheng
- 2018 Andersen-Clewell Trainee Award of Society of Toxicology, Yi-Hsien Cheng
- 2018 Outstanding Postdoctoral Award of the Nanotoxicology Specialty Section of Society of Toxicology, Yi-Hsien Cheng
- 2018 Perry J. Gehring Biological Modeling Endowment Award of Society of Toxicology, Yi-Hsien Cheng
- 2018 Biological Modeling Specialty Section Trainee Award of Society of Toxicology, Miao Li
- 2018 Postdoctoral Excellence Award of Regulatory and Safety Evaluation Specialty Section of Society of Toxicology, Miao Li
- 2018 Society of Toxicology Committee on Diversity (CDI) Undergraduate Travel Award, Trevor Elwell-Cuddy
- 2018 Top 10 Best Risk Assessment-Related Abstracts, Risk Assessment Specialty Section of Society of Toxicology, Yi-Hsien Cheng
- 2018 Outstanding Poster Presentation Award of Central States Society of Toxicology, Yu Shin Wang
- 2017 K-State Office of Undergraduate Research and Creative Inquiry (OURCI) Research Award, Trevor Elwell-Cuddy
- 2017 Most Promising Award in Division of Biology at K-State, Trevor Elwell-Cuddy

PROFESSIONAL MEMBERSHIPS

- Society of Toxicology (SOT, 2011-present)
- Society for Risk Analysis (SRA, 2019-present)
- International Society of Pharmacometrics (ISoP, 2019-present)
- American Academy of Veterinary Pharmacology and Therapeutics (AAVPT, 2019-present)
- American Association for the Advancement of Science (AAAS, 2020-present)
- American Public Health Association (APHA, 2020-present)

PROFESSIONAL SERVICE

Grant reviewer

2023: NIH MCST-14: Small Business: Computational, Modeling, and Biodata Management (05/2023 ZRG1 MCST-B(14) B) (Hybrid meeting, March 15, attended via Zoom)

2022.10: Chief Scientists Grants Program, U.S. Food and Drug Administration (FDA) Office of Women's Health (OWH)

2022.08: Basic Research Grant Projects, Czech Science Foundation

2022.02: NWO domain Applied and Engineering Sciences (NWO domain TTW), Netherlands Organisation for Scientific Research (NWO)

2021: NIH Special Emphasis Panel/Scientific Review Group 2021/05 ZRG1 EMNR-D (56) R: "PAR Panel: Pediatric and Obstetric Pharmacology and Therapeutics" (April 19-20, 2021 via Zoom)

2020.12: Biotechnology and Biological Sciences Research Council (BBSRC), UK Research and Innovation

2020.07: Environmental Systems Research "Urban Regions" Call of the Vienna Science and Technology Fund (WWTF)

2018: NIH Systemic Injury by Environmental Exposure (SIEE) Study Section (Feb 28 – March 01, 2018)

2018.02: Energy, Environment, and Resources Division of the Natural Sciences and Engineering Research Council (NSERC) of Canada

2017: USDA/NIFA Panel on Nanotechnology for Agriculture and Food Systems (October 16-20, 2017)

2016.09: International Cooperation Program, National Commission for Scientific and Technological Research, Chile

Advisory Activities

2022.10-11: External reviewer, U.S. Centers for Disease Control and Prevention/National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (CDC/NCEH/ATSDR), PFAS Multi-Site Study Pharmacokinetic Modeling Technical Support Document

2021.04-07: External reviewer, U.S. Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition, Division for Risk and Decision Analysis, "Biomonitoring Data and Reverse Dosimetry to Estimate Chemical Exposures"

2021.01: External reviewer, U.S. Centers for Disease Control and Prevention/National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (CDC/NCEH/ATSDR), Bayesian estimation of human population toxicokinetics of PFOA, PFOS, PFHxS and PFNA from studies of contaminated drinking water

2020.09: External reviewer, California Environmental Protection Agency (CalEPA), Office of Environmental Health Hazard Assessment (OEHHA), Public Health Goals for Haloacetic Acids in Drinking Water: Monochloroacetic acid (MCA), dichloroacetic acid (DCA), trichloroacetic acid (TCA), monobromoacetic acid (MBA), and dibromoacetic acid (DBA)

2020.04-08: External reviewer, U.S. Environmental Protection Agency (EPA), Office of Science Coordination and Policy (OSCP), Toxic Substance Control Act (TSCA), Science Advisory Committee on Chemicals (SACC), Risk Evaluation Meeting for Perchloroethylene. May 26-29, 2020. [Link](#)

2018.07-11: External reviewer, U.S. Environmental Protection Agency (EPA), Office of Pesticide Programs (OPP), "White Paper on the Application of PBPK Models to Carbaryl Risk Assessment" and "White Paper on the Application of PBPK Models to Pyrethroid Risk Assessment" [News](#)

2016.04-11: External reviewer, U.S. Environmental Protection Agency (EPA), Office of Pesticide Programs (OPP), “Physiologically-based pharmacokinetic/pharmacodynamic model for the herbicide atrazine”

PhD thesis external examiner

1. Student: Muhammad Furqan Akhtar, PhD in Pharmacology and Toxicology (2016); Thesis title: Chemical, microbiological and toxicological evaluation of textile dyeing industry wastewater; Advisor: Muhammad Ashraf, University of Veterinary & Animal Sciences, Lahore, Pakistan
2. Student: Ali Sharif, PhD in Pharmacology and Toxicology (2016); Thesis title: Chemical microbiological and toxicological evaluation of pharmaceutical effluent wastewater; Advisor: Muhammad Ashraf, University of Veterinary & Animal Sciences, Lahore, Pakistan
3. Student: Tshepo Paulsen Moto, PhD in Public Health (2020); Thesis title: Development of a PBPK-based health risk assessment framework for exposure to cerium, gold, silver and titanium engineered nanoparticles; Advisor: Kuku Voyi; School of Health Systems and Public Health, University of Pretoria, South Africa
4. Student: Sidra Altaf, PhD in Pharmacology (2020); Thesis title: Detoxification of organophosphate poisoning using biomimetic nanosponge; Advisor: Faqir Muhammad, University of Agriculture, Faisalabad, Pakistan

Society of Toxicology (SOT) Service

2021.05-present: Presidential Chain (four-year term: Vice President-Elect, Vice President, President, and then Past President, Biological Modeling Specialty Section (BMSS) of Society of Toxicology (SOT)

2021.05-2023.04: Councilor, Nanoscience and Advanced Materials Specialty Section (NAMSS) of SOT

2023.03: Served as a Chair of the “Computational Toxicology I” poster session for 2023 SOT meeting

2022.12: Served as a Member of the SOT AACT Awards Committee for 2023 SOT meeting

2022.01: Served as the Chair of the SOT BMSS Awards Committee

2022.01: Served as a Member of the SOT NAMSS Awards Committee

2021: Served as the Chair for the Poster session of “Disposition/Pharmacokinetics” in the SOT 2021 Virtual Annual Meeting (VAM)

2020.03-2022.04: Served as a Mentor in the SOT AACT Mentor-Mentee Matching Program (Mentee: Gabriel Tao from University of Houston)

2018.05-2020.04: Served as the Secretary/Treasurer of Central States Society of Toxicology (CSSOT)

2019: Assisted the CSSOT President to host the Annual Meeting of CSSOT in Des Moines, IA

2019: Served as a Poster Judge in the CSSOT Annual Meeting in Des Moines, IA

2018: Assisted the CSSOT President to host the Annual Meeting of CSSOT in Manhattan, KS

2017: Served as a *Sunday Host Mentor* for the Sunday Undergraduate Education Program organized by the Committee on Diversity Initiatives of SOT

2016: Served as a *Sunday Host Mentor* for the Sunday Undergraduate Education Program organized by the Committee on Diversity Initiatives of SOT

2016: Served as a member in the SOT Biological Modeling Specialty Section (BMSS) *Best Paper Award* Committee

2016: Served as a member in the SOT American Association of Chinese in Toxicology (AACT) Special Interest Group *Distinguished Chinese Toxicologist Lectureship Award* Committee

2016: Served as a member in the SOT AACT *Jean Lu Student Scholarship Award* Committee

2016: Served as a member in the SOT AACT *Best Abstract Award* Committee

2015: Served as a member in the SOT AACT *Jean Lu Student Scholarship Award* Committee

2014: Served as a member in the SOT BMSS *Best Paper Award* Committee

2014: Served as a member in the SOT AACT *Jean Lu Student Scholarship Award* Committee

2014: Served as a member in the SOT AACT *Best Abstract Award* Committee

Service at Kansas State University

2020.07-2021.05: Member of Research Committee of College of Veterinary Medicine

2017.04-2021.05: Member of Graduate Studies Committee of Department of Anatomy and Physiology

2017: Served as a Search Committee member of the Assistant/Associate/Full Professor position in Clinical Pharmacology in Department of Anatomy and Physiology

2016: Served as a Search Committee member of the Research Assistant Professor position in Analytical Chemistry in Department of Anatomy and Physiology

2016: Served as a Search Committee member of Dr. Robert DeLong's Research Assistant position

2016: Served as a Search Committee member of Dr. Majid Jaber-Douraki's Postdoctoral Fellow

Service at University of Florida

2022.06-present: Member of the UF PHHP Curriculum Committee

2022.01-present: PhD Admissions Committee member, Department of Environmental & Global Health

2021.09-present: Seminar Co-coordinator, Department of Environmental and Global Health

2022.01-2022.09: Member of the UF Health Science Center (HSC) AI Search Committee, Diagnostics and Therapeutics Theme

2022.01: 2022 PHHP Research Day Abstract Judge, College of Public Health and Health Professions

External Reviewer for tenure and promotion applications from other universities

2022.05: Dingsheng Li, School of Public Health, University of Nevada, Reno, Nevada

Academic Editorship

2022.06-present: Editorial Board Member, *Food and Chemical Toxicology*

2022.06-present: Guest-Editor, Special Issue: "New approach methodologies and machine learning in food safety and chemical risk assessment: Development of reproducible, open-source, and user-friendly tools for exposure, toxicokinetic, and toxicity assessments in the 21st century", *Food and Chemical Toxicology*

Ad Hoc Reviewer for the following journals

- AAPS Journal
- AAPS PharmSciTech
- ACS Agricultural Science & Technology

- ACS Applied Materials & Interfaces
- ACS Nano
- Advanced Materials
- Agronomy
- Aquaculture
- BioMed Research International
- Biomedical Chromatography
- Biomedical and Environmental Sciences
- BMC Pharmacology and Toxicology
- BMC Systems Biology
- BMC Veterinary Research
- Bulletin of Environmental Contamination and Toxicology
- Cancers
- Chemical-Biological Interactions
- Chemosphere
- Computational Toxicology
- Computer Methods and Programs in Biomedicine
- Drug Design, Development and Therapy
- Ecotoxicology and Environmental Safety
- Environment International
- Environmental Health Perspectives
- Environmental Pollution
- Environmental Research
- Environmental Science & Technology
- Environmental Science: Nano
- Environmental Toxicology and Pharmacology
- European Journal of Pharmaceutics and Biopharmaceutics
- Food Additives and Contaminants
- Food and Chemical Toxicology
- International Journal of Environmental Research and Public Health
- International Journal of Molecular Sciences
- International Journal of Nanomedicine
- Journal of Agricultural and Food Chemistry
- Journal of Controlled Release
- Journal of Exposure Science and Environmental Epidemiology
- Journal of Fish Diseases
- Journal of Hazardous Materials
- Journal of Toxicology and Environmental Health, Part A: Current Issues
- Journal of Veterinary Pharmacology and Therapeutics
- Molecules

- Nano Letters
- Nanotechnology Reviews
- Nanotoxicology
- Neurotoxicology
- Neurotoxicology and Teratology
- Neurotoxicity Research
- Nucleic Acids Research
- One Health
- Particle and Fibre Toxicology
- Pharmaceutics
- PLOS ONE
- Poultry Science
- Proteomics - Clinical Applications
- Regulatory Toxicology and Pharmacology
- Reproductive Toxicology
- Science of the Total Environment
- Scientific Reports
- Small Ruminant Research
- The Journal of Physiology
- Toxicological Sciences
- Toxicology in Vitro
- Toxics
- WIREs Nanomedicine and Nanobiotechnology
- Xenobiotica

CONTINUED EDUCATION

2023.03: SOT CE Course PM12: Making the most of your data: How to build machine-learning models for toxicology. Lecturers: Drs. Nigel Greene, Catrin Hasselgren, Fjodor Melnikov, Alexander Tropsha, Timothy Allen, Nigel Greene. March 27, 2022. (3 hours)

2022.03: SOT CE Course AM03: Evidence Map, Scoping Review, Rapid Systematic Review, and Systematic Review—And How to Conduct Them. Lecturers: Drs. Amy Wang, Vickie Walker, Xabier Arzuage, Ruchir Shah, Paul Whaley. (Virtual). March 27, 2022. (3 hours)

2021.09: Phoenix Workshops (A PK/PD session on Monday, a drug-disease-trial session using Parkinson's disease as an example on Tuesday, and a time to event session on Wednesday). Organizers and Lecturers: Drs. Stephan Schmidt, Valvanera Vozmediano Esteban, and Serge Guzy (virtual). University of Florida Center for Pharmacometrics and Systems Pharmacology. September 27-29, 2021.

2021.07: First Year Faculty Teaching Academy (FYFTA), Center for Teaching Excellence, University of Florida (virtual), July 28-30, 2021.

2021.03: SOT CE Course CE14: Understanding Tox21/ToxCast High-Throughput Screening Data and Application to Modeling. Lecturers: Drs. Menghang Xiao, Ruili Huang, Jui-Hua Hsieh, Katie Paul-Friedman, Richard Judson, Agnes Karmaus, Eva Wedebye. (Virtual). March 26, 2021. (3 hours)

2021.01: LGBTQ+ Allyship and You Training. Offered by Diversity and Resiliency Institute of El Paso. Completed on January 05, 2021. (5 hours)

2020.08: Anti-Racism Training. Offered by Diversity and Resiliency Institute of El Paso. Completed on August 2, 2020. (6 hours)

2020.04: The GastroPlus “Workshop from Home” Seminars. Topics and Lecturers: GastroPlus Introduction (Dr. Maxime Le Merdy); Special Population predictions (Dr. Viera Lukacova); DDI Predictions (John DiBella); Transporters in PBPK Modeling (Dr. Ke Szeto); PBPK/PD Modeling (Dr. Haiying Zhou). April 13-17, 2020. (7.5 hours)

2019.12: SRA Workshop WK7AllS: Introduction to Quantitative Risk Assessment. Lecturer: Dr. Emma Hartnett. Arlington, VA. December 08, 2019. (8 hours)

2019.07: IUTOX CE Course: Applications of chemical risk assessment in establishing food safety standards. Lecturers: Dr. Gordon Shephard, Dr. Alan Boobis, Dr. Matthew Wheeler, and Dr. Peter Cressey. Honolulu, Hawaii. July 15, 2019. (2 hours)

2019.06: Leverage Artificial Intelligence and Machine Learning to Advance Environmental Health Research and Decisions. Washington, DC. June 6-7, 2019. (Registered and attended via live webcast)

2019.05: A 3-Day Course on the Concepts and Applications of Pharmacokinetic-Pharmacodynamic (PK/PD) Modeling. Instructors: Dr. William J. Jusko, Dr. Donald E. Mager. Buffalo Pharmacometric Workshops, Niagara Falls, NY. May 13-15, 2019.

2019.05: A 3-Day Course on the Structural PK/PD Model Building for Basic Clinical and Pre-Clinical Pharmacology Studies. Instructors: Dr. Daniel Weiner. Buffalo Pharmacometric Workshops, Niagara Falls, NY. May 16-18, 2019.

2019.04: A 5-Day Dose Response Assessment Boot Camp. Instructors: Dr. Michael Dourson, Dr. Bernard Gadagbui, Dr. Melissa Vincent. Toxicology Excellence for Risk Assessment (TERA), Cincinnati, Ohio. April 1-5, 2019.

2019.03: SOT CE Course SR02: Publicly Available Exposure Tools to Inform the Toxic Substances Control Act. Lecturers: Dr. Kristin Isaacs, and Dr. John Wambaugh. Baltimore, MD. March 10, 2019. (1 hour)

2019.03: SOT CE Course AM07: Role of Toxicokinetics in Human Health Safety Assessments. Lecturers: Dr. Curtis Klaassen, Dr. Emile Chen, Dr. Sabitha Papineni, Dr. Jean-Lou Dorne, and Dr. Anna Lowit. Baltimore, MD. March 10, 2019. (4 hours)

2019.03: SOT CE Course PM12: Current Dose-Response Modeling Strategies and Applications in Chemical Risk Assessment. Lecturers: Dr. Jeff Gift, Dr. Allen Davis, Dr. Kan Shao, and Dr. Zhongyu (June) Yan. Baltimore, MD. March 10, 2019. (4 hours)

2018.06: Concepts in Clinical Pharmacokinetics Web-Based Continuing Education Course, Center for Continuing Education, University of Georgia. (20 contact hours)

2018.03: Software Carpentry Workshop on Research Computing Skills. Instructors: Rebel Cummings-Sauls (K-State) and Boryana Koseva (KU). Helpers: Ryan Otto, Kyle Hutson, Adam Tygart, Dave Turner, and Pete Rosario. Kansas State University Engineering Hall. March 20-21, 2018.

2017.08: Residue Avoidance Strategy for the Export Market. Meeting organizers: Kendal Frazier at National Cattlemen’s Beef Association (NCBA), Barry Carpenter at North American Meat Institute (NAMI), and Thad Lively at U.S. Meat Export Federation (USMEF). Embassy Suites, Denver International Airport, Denver CO. August 30, 2017.

2017.07: Hands-on experience with Model-Informed Drug Development: Incorporating population variability into mechanistic prediction of PK and modeling of PK and modeling PK-PD. Lecturers: Dr. Lain Gardner, Dr. Sibylle Neuhoff, Dr. Mano Chetty, Dr. Shriram M. Pathak, Dr. Amaka Ezuruike, and Dr. Ciaran Fisher. Certara Simcyp Full-week Workshop, San Francisco, CA. July 10-14, 2017.

2016.08: Physiologically-Based Pharmacokinetic Modeling Workshop for Beginners. Organizer and instructor: Dr. Raymond S. H. Yang. Colorado State University, Fort Collins, CO. August 1-5, 2016.

2013.03: SOT CE Course: Understanding Toxic Neuropathy in Drug Development: Both Clinical and Nonclinical Perspectives. Lecturers: Dr. Mary J. Kallman, Dr. Mark Cartwright, Dr. Amy Chappell, Dr. Joseph Arezzo, and Dr. John Benitez. San Antonio, TX. March 10, 2013. (4 hours)

2012.03: SOT CE Course PM13: The Use of Physiologically-Based Pharmacokinetic Modeling to Inform Early Life Sensitivity to Chemical Toxicity. Lecturers: Dr. Harvey J. Clewell, Dr. Rebecca A. Clewell, Dr. Miyoung Yoon, Dr. Rogelio Tornado-Velez, and Matthew P. Longnecker. San Francisco, CA. March 11, 2012. (4 hours)

2011.03: SOT CE course PM13: Quantitative In Vitro to In Vivo Extrapolation: The Essential Element of In Vitro Assay Based Risk Assessment. Lecturers: Dr. Harvey J. Clewell, Dr. Bastiaan J. Blaauboer, Dr. Nynke Kramer, and Dr. Justin G. Teeguarden. Washington, DC. March 6, 2011. (4 hours)