

John Daniel Clarke

CURRENT POSITION

Assistant Professor

Washington State University
College of Pharmacy and Pharmaceutical
Sciences
Department of Pharmaceutical Sciences
Office: 509-358-7929, Lab: 509-368-6543
Email: j.clarke@wsu.edu

Address:

WSU Department of Pharmaceutical
Sciences
412 E. Spokane Blvd.
Spokane, WA 99202-2131

EDUCATION/TRAINING

University of Arizona, Tucson, Arizona (2011-2016)

Postdoctoral fellow, Pharmacology and Toxicology

Oregon State University, Corvallis, Oregon (2006-2011)

PhD, Molecular and Cellular Biology

Brigham Young University-Idaho, Rexburg, Idaho (2003-2005)

Bachelor of Science

Major in Biology, minor in Chemistry

Edmonds Community College, Edmonds, Washington (1998-2001)

Associate of arts transfer degree

POSITIONS AND EMPLOYMENT

Assistant Professor (2016-present)

Washington State University, Spokane, Washington
College of Pharmacy and Pharmaceutical Sciences (CPPS), Department of
Pharmaceutical Sciences

Exposures, Diseases, Genomics and Environment (EDGE) Center Affiliate (2017-present)

CRT: Hepatic, Renal and Gastrointestinal Diseases
University of Washington, Seattle, Washington

Southwest Environmental Health Sciences Center (SWEHSC) Member (2014-2016)

RFG3: Adaptive Responses to Environmental Stress
University of Arizona, Tucson, Arizona

Postdoctoral research associate (2013-2016)

University of Arizona, Tucson, Arizona
Mentor: Dr. Nathan Cherrington

NIEHS postdoctoral T32 trainee (2011-2013)

University of Arizona, Tucson, Arizona
Mentor: Dr. Nathan Cherrington

Department of Defense Prostate Cancer Research Program Graduate Student Fellow

(June 2009-June 2011)

Graduate research assistant (Sept 2006-June 2011)

Oregon State University, Corvallis, Oregon.
Mentor: Dr. Emily Ho

AWARDS AND HONORS**Washington State University, Provost Featured Faculty** (2017)

Provost's office, Washington State University

Best Postdoctoral Publication Award (2015)

Postdoctoral Association, The Society of Toxicology

1st place Postdoctoral Poster Presentation Award (2014)

NIEHS Tamburro Symposium on Environmental Chemicals and Liver Disease

1st place Postdoctoral Platform Award (2014)

Mountain West Chapter, The Society of Toxicology

2nd place Gabriel L. Plaa Education Award (2014)

Mechanisms Specialty Section, The Society of Toxicology

1st place Gabriel L. Plaa Education Award (2013)

Mechanisms Specialty Section, The Society of Toxicology

NIEHS Postdoctoral Trainee in Environmental Toxicology of Complex Diseases (Jan 2012-Nov 2013)

Department of Pharmacology and Toxicology, The University of Arizona

Predoctoral Training Fellowship (2009-2011)

Prostate Cancer Research Program, United States Department of Defense

Diet and Cancer Research Interest Group Poster Presentation Award Winner (2010, 2011)

Experimental Biology Conference, American Society for Nutrition

Dietary Bioactive Components Research Interest Group Poster Winner (2010, 2011)

Experimental Biology Conference, American Society for Nutrition

Helen Charley Fellowship (2010-2011)

Nutrition and Exercise Sciences, Oregon State University

Office of Dietary Supplements Practicum Travel Award Winner (2010)

Dietary Supplement Research Practicum

American Society for Nutrition Student Interest Group Poster Presentation Finalist (2010)

Experimental Biology Conference

Thayer Raymond Fellowship (2009-2010)

College of Health and Human Sciences, Oregon State University

American Institute for Cancer Research Conference Travel Scholarship (Nov 2008)

Sponsored by Campbell Soup Company

Oregon Lottery Graduate Scholarship (2008-2009, 2009-2010, 2010-2011)

Graduate School, Oregon State University

Betty E. Hawthorne Fellowship (2008-2009, 2010-2011)

College of Health and Human Sciences, Oregon State University

RESEARCH SUPPORT**Active:**

- 1) NIEHS Outstanding New Environmental Scientist (ONES)
Title: Mechanisms of microcystin-induced hepatocellular carcinoma in nonalcoholic steatohepatitis
Dates: Jan 2021 – Oct 2025
Role: PI
Total direct costs: \$1,532,695
- 2) NIEHS K99/R00 pathway to independence grant
Title: Microcystin-LR toxicity in nonalcoholic steatohepatitis
Dates: Sept 2015 – Mar 2022 (NCE)
Role: PI
Total direct costs: \$708,017

- 3) NCCIH R21
Title: Enteric and hepatic transporter mechanisms for pharmacokinetic natural product-drug interactions
Dates: Aug 2020 – July 2022
Role: PI
Total direct costs: \$275,000
- 4) NCCIH R56
Title: Risk of xenobiotic-drug interactions in chronic disease
Dates: Sept 2020 – Sept 2021 (NCE)
Role: PI
Total direct costs: \$120,097
- 5) NCCIH U54 Center of Excellence for Natural Product Drug Interaction Research
Title: Natural product-drug interactions research: The roadmap to best practices
Dates: Sept 2020 – Aug 2025
Role: Co-I, Pharmacology Core and Analytical Core
PI: Mary Paine
Total direct costs: \$9,042,186

Completed:

- 1) NCCIH U54 Center of Excellence for Natural Product Drug Interaction Research
Title: Natural product-drug interactions research: The roadmap to best practices
Dates: Sept 2017 – Aug 2020
Role: Co-I, Pharmacology Core
Total direct costs: \$10,575,962
- 2) Illumina NGS Reagents Grant, Washington State University Genomics Core
Title: Effects of a Western diet on drug metabolism pathways in the gut
Dates: June 2018 – May 2019
Role: PI
Total direct costs: \$5,000
- 3) Washington State University Health Equity and Resilience Research Collaborative Community Partnership Seed Grant
Title: Toxin exposure and liver disease disparity in Pacific Northwest American Indian Tribes
Dates: Oct 2017 – Sept 2018
Role: PI
Total direct costs: \$5,000
- 4) Southwest Environmental Health Sciences Center (SWEHSC) Pilot Project
Title: Interaction between the liver disease nonalcoholic fatty liver disease and the ubiquitous cyanotoxin microcystin-LR found in drinking water.
Dates: Sept 2013 – Sept 2015
Role: PI
Total direct costs: \$20,000
- 5) SWEHSC Career Development Program
Title: Interaction between the liver disease nonalcoholic fatty liver disease and the ubiquitous cyanotoxin microcystin-LR found in drinking water.
Dates: Sept 2013 – Sept 2015
Role: Trainee
Total direct costs: \$20,000

- 6) Arizona Research Labs small confocal microscopy grants
 Title: Hepatic drug transporter localization in nonalcoholic fatty liver disease
 Dates: May 2013 - Sept 2013
 Role: PI
 Total direct costs: \$5,000
- 7) SWEHSC pilot project
 Title: Induced pluripotent stems cells to model human genetic determinants of environmental toxicology
 Dates: Jan 2013 - Dec 2013
 PI: Walt Klimecki
 Role: Co-PI
 Total direct costs: \$40,000
- 8) Department of Defense Prostate Cancer Research Program
 Title: Diet and Epigenetic Interactions in Prostate Cancer Prevention
 Dates: June 2009 - June 2011
 Role: PI
 Total direct costs: \$85,418

PEER-REVIEWED PUBLICATIONS

H-index: 20; Relative Citation Ratio (RCR): 1.94 ± 0.35 (mean \pm SEM)

- 1) Arman, T., Baron, J.A., Lynch, K.D., White, L.A., Aldan, J., **Clarke, J.D.** MCLR-elicited hepatic fibrosis and carcinogenic gene expression changes persist in rats with diet-induced nonalcoholic steatohepatitis through a 4-week recovery period. *Toxicology*. 2021 Dec;464:153021. PMC8629135
- 2) Arman, T., **Clarke, J.D.** Microcystin Toxicokinetics, Molecular Toxicology, and Pathophysiology in Preclinical Models and Humans. *Toxins*. 2021 Jul 29;13(8). PMC8402503
- 3) Lynch, K.D., Montonye, M.L., Tian, D.D., Arman, T., Oyanna, V.O., Bechtold, B.J., Graf, T.N., Oberlies, N.H., Paine, M.F., **Clarke, J.D.** Hepatic organic anion transporting polypeptides mediate disposition of milk thistle flavonolignans and pharmacokinetic silymarin-drug interactions. *Phytother Res*. 2021 Jun;35(6):3286-3297. PMC8217340
- 4) Cox, E.J., Tian, D.D., **Clarke, J.D.**, Rettie, A.E., Unadkat, J.D., Thummel, K.E., McCune, J.S., Paine, M.F. Modeling pharmacokinetic natural product-drug interactions for decision making: a NaPDI Center recommended approach. *Pharmacol Rev*. 2021. Apr;73(2):847-859. PMC7956993
- 5) Bechtold B., **Clarke J.D.** Multi-factorial pharmacokinetic interactions: unraveling complexities in precision drug therapy. *Expert Opin Drug Metab Toxicol*. 2021 Apr;17(4):397-412. PMC8110027
- 6) Arman T., Lynch K.D., Goedken M., **Clarke J.D.** Sub-chronic microcystin-LR renal toxicity in rats fed a high fat/high cholesterol diet. *Chemosphere*. 2021 Apr;269:128773. PMC8276626
- 7) Toth E.L., **Clarke J.D.**, Csanaky I.L., Cherrington N.J. Interaction of Oatp1b2 expression and nonalcoholic steatohepatitis on pravastatin plasma clearance. *Biochem Pharmacol*. 2019 Dec 25;174:113780. PMC4065643
- 8) Montonye M.L., Tian D.D., Arman T., Lynch K.D., Hagenbuch B., Paine M.F., **Clarke J.D.** A pharmacokinetic natural product-disease-drug interaction: a double hit of silymarin and

- nonalcoholic steatohepatitis on hepatic transporters in a rat model. *J Pharmacol Exp Ther*. 2019 Aug 16. pii: jpet.119.260489. PMC6800447
- 9) Arman T., Lynch K.D., Montonye M.L., Goedken M., **Clarke J.D.** Sub-Chronic Microcystin-LR Liver Toxicity in Preexisting Diet-Induced Nonalcoholic Steatohepatitis in Rats. *Toxins (Basel)*. 2019 Jul 9;11(7). pii: E398. PMC6669744
- 10) **Clarke, J.D.**, Dzierlenga, A.L., Arman, T., Toth, E., Li, H., Lynch, K.D., Tian, D.D., Goedken, M., Paine, M.F., Cherrington, N.J., Nonalcoholic fatty liver disease alters microcystin-LR toxicokinetics and acute toxicity. *Toxicon*. 2019 Apr;15(162):1-8. PMC6447445
***corresponding author**
- 11) Toth E., Li H., Dzierlenga A.L., **Clarke J.D.**, Vildhede A., Goedken M., Cherrington N.J. Gene-by-environment interaction of Bcrp^{-/-} and MCD diet-induced nonalcoholic steatohepatitis alters SN-38 disposition. *Drug Metab Dispos* 2018 Nov;46(11):1478-1486. PMC6193212
- 12) Beaver L.M., Löhr C.V., **Clarke J.D.**, Glasser S.T., Watson G.W., Wong C.P., Zhang Z., Williams D.E., Dashwood R.H., Shannon J., Thuillier P., Ho E. Broccoli Sprouts Delay Prostate Cancer Formation and Decrease Prostate Cancer Severity with a Concurrent Decrease in HDAC3 Protein Expression in Transgenic Adenocarcinoma of the Mouse Prostate (TRAMP) Mice. *Curr Dev Nutr*. 2018 Mar;2(3):nzy002. PMC6041877
- 13) Li H., Canet M.J., **Clarke J.D.**, Billheimer D., Xanthakos S.A., Lavine J.E., Erickson R.P., Cherrington N.J. Pediatric Cytochrome P450 Activity Alterations in Nonalcoholic Steatohepatitis. *Drug Metab Dispos*. 2017 Dec;45(12):1317-132. PMC5697442
- 14) **Clarke, J.D.**, Novak, P., Lake, A.D., Hardwick, R.N., Cherrington, N.J. Impaired glycosylation and membrane localization of uptake and efflux transporters in human non-alcoholic fatty liver disease. *Liver Int*: 2017 Jul;37(7):1074-1081. PMC5479731
- 15) Li H., **Clarke J.D.**, Dzierlenga A.L., Bear J., Goedken M.J., Cherrington N.J. In vivo cytochrome P450 activity alterations in diabetic nonalcoholic steatohepatitis mice. *J Biochem Mol Toxicol*: 2017 Feb;31(2). PMC5426479
- 16) Dzierlenga A.L., **Clarke J.D.**, Cherrington N.J. Nonalcoholic Steatohepatitis Modulates Membrane Protein Retrieval and Insertion Processes. *Drug Metab Dispos*. 2016 Nov;44(11):1799-1807. PMC5074469
- 17) Laho T., **Clarke J.D.**, Dzierlenga A.L., Li H., Klein D.M., Goedken M., Micuda S., Cherrington N.J. Effect of nonalcoholic steatohepatitis on renal filtration and secretion of adefovir. *Biochem Pharmacol*: 115:144-51; 2016. PMC5393628
- 18) Dzierlenga A.L., **Clarke J.D.**, Klein D.M., Anumol T., Snyder S.A., Li H., Cherrington N.J. Biliary Elimination of Pemetrexed Is Dependent on Mrp2 in Rats: Potential Mechanism of Variable Response in Nonalcoholic Steatohepatitis. *J Pharmacol Exp Ther*: 358(2):246-53; 2016. PMC4959105
- 19) **Clarke, J.D.**, Dzierlenga A.L., Nelson, N.R., Wertz, S., Cherrington, N.J. Mechanism of Altered Metformin Distribution in Nonalcoholic Steatohepatitis. *Diabetes*. 64(9):3305-13; 2015. PMC4542448
- 20) **Clarke, J.D.**, Cherrington, N.J. Nonalcoholic Steatohepatitis in Precision Medicine: Unraveling the Factors that Contribute to Individual Variability. *Pharmacol Ther*: 151:99-106; 2015. PMC4457694

- 21) Dzierlenga, A.L., **Clarke, J.D.**, Hargraves, T.L., Ainslie, G.R., Vanderah, T.W., Paine, M.F., Cherrington, N.J. Mechanistic Basis of Altered Morphine Disposition in Nonalcoholic Steatohepatitis. *J. Pharmacol. Exp. Ther.* 352(3):462-70; 2015. PMC4352592
- 22) Canet, M.J., Hardwick, R.N., Lake, A.D., Dzierlenga, A.L., **Clarke, J.D.**, Goedken, M.J., Cherrington, N.J. Renal Xenobiotic Transporter Expression is Altered in Multiple Experimental Models of Nonalcoholic Steatohepatitis. *Drug Metab Dispos*: 43:266-72; 2015. PMC4293398
- 23) Hardwick, R.N., **Clarke, J.D.**, Lake, A.D., Canet, M.J., Anumol, T., Street, S.M., Merrell, M.D., Goedken, M.J., Snyder, S.A., Cherrington, N.J. Increased susceptibility to methotrexate-induced toxicity in non-alcoholic steatohepatitis. *Tox. Sci.* 142:45-55; 2014. PMC4334808
- 24) **Clarke, J.D.**, Hardwick, R.H., Lake, A.D., Lickteig, A.J., Goedken, M.J., Klaassen, C.D., Cherrington, N.J. Synergistic Interaction between Genetics and Disease on Pravastatin Disposition. *J. Hepatol.* 61:139-47; 2014. PMC4065643. *Selected for a focus piece in Journal*
- 25) **Clarke, J.D.**, Hardwick, R.H., Lake, A.D., Canet, M.J., Cherrington, N.J. Experimental nonalcoholic steatohepatitis increases exposure to simvastatin hydroxy acid by decreasing hepatic organic anion transporting polypeptide expression. *J. Pharmacol Exp Ther*: 348:452-8; 2014. PMC3935144
- 26) Canet, M.J., Hardwick, R.N., Lake A.D., Dzierlenga, A.L., **Clarke, J.D.**, Cherrington, N.J. Modeling human nonalcoholic steatohepatitis-associated changes in drug transporter expression using experimental rodent models. *Drug Metab Dispos*: 42:586-95; 2014. PMC3965900
- 27) Merrell, M.D., Nyagode, B.A., **Clarke, J.D.**, Cherrington, N.J. Morgan, E.T. Selective and cytokine-dependent regulation of hepatic transporters and bile acid homeostasis during infectious colitis in mice. *Drug Metab Dispos*: 42:596-602; 2014. PMC3965897
- 28) **Clarke, J.D.**, Sharapova, T., Maher, J.M., Blomme, R., Cherrington, N.J. Circulating microRNA 122 as a Biomarker of Liver Injury in a Mouse Model of Non-alcoholic Steatohepatitis. *J Appl Toxicol*: 34:726-32; 2014. PMC4004685
- 29) **Clarke, J.D.**, Novak, P., Lake, A.D., Shipkova, P., Aranibar, N., Robertson, D., Reily, M.D., Lehman-McKeeman, L.D., Cherrington, N.J. Characterization of hepatocellular carcinoma related genes and metabolites in human non-alcoholic fatty liver disease. *Dig Dis Sci*: 59:365-74; 2014. PMC3945102
- 30) Meyer M., Kesic M.J., **Clarke J.D.**, Ho E., Simmen R., Diaz-Sanchez D., Noah T.L., Jaspers I. Sulforaphane induces SLPI secretion in nasal mucosa. *Resp Med.* 107:472-75; 2013. PMC3640824
- 31) **Clarke J.D.**, Cherrington N.J. Genetics or environment in drug transport: the case of organic anion transporting polypeptides and adverse drug reactions. *Expert Opin Drug Metab Toxicol* 8:349-60; 2012. PMC3753226
- 32) **Clarke J.D.**, Riedl K., Bella D., Schwartz S.J., Stevens J.F., Ho E. Comparison of isothiocyanate metabolite levels and histone deacetylase activity in human subjects consuming broccoli sprouts or broccoli supplement. *J Agric Food Chem* 59:10955-63; 2011. PMC3201700
- 33) **Clarke J.D.**, Hsu A., Riedl K., Bella D., Schwartz S.J., Stevens J.F., Ho E. Bioavailability and inter-conversion of sulforaphane and erucin in human subjects consuming broccoli

sprouts or broccoli supplement in a cross-over study design. Pharmacol Res 64:456-63; 2011. PMC3183106

- 34) **Clarke J.D.**, Hsu A., Williams D.E., Dashwood R.H., Stevens J.F., Yamamoto M., Ho E. Metabolism and tissue distribution of sulforaphane in Nrf2 knockout and wild-type mice. Pharm Res; 2011. PMC3253624
- 35) **Clarke J.D.**, Hsu A., Yu Z., Dashwood R.H., Ho E. Differential effects of sulforaphane on histone deacetylases, cell cycle arrest and apoptosis in normal prostate cells versus hyperplastic and cancerous prostate cells. Mol Nutr Food Res 55:999-1009; 2011. PMC3129466
- 36) Ho E., **Clarke J.D.**, Dashwood R.H. Dietary sulforaphane, a histone deacetylase inhibitor for cancer prevention. J Nutr 139:2393-6; 2009. PMC2777483
- 37) **Clarke J.D.**, Dashwood R.H., Ho E. Multi-targeted prevention of cancer by sulforaphane. Cancer Lett 269:291-304; 2008. PMC2579766

ABSTRACTS

- 1) Lynch K.D., Iverson D.T., Clarke J.D., Microcystin-LR causes time- and dose-dependent changes in phosphorylation pathways in hepatocytes. Society of Toxicology 61st Annual Meeting, San Diego, CA. 2022.
- 2) Oyanna V., Graf T.N., Oberlies N.H., Clarke J.D., Green Tea Alters Bile Acid Micellar Solubility of Raloxifene. Society of Toxicology 61st Annual Meeting, San Diego, CA. 2022.
- 3) Bechtold B.J., Graf T.N., Oberlies N.H., Clarke J.D., Silymarin-mediated Natural Product–Drug Interactions involving Enteric Organic Anion Transporting Polypeptides. American Society for Pharmacology and Experimental Therapeutics annual meeting, Philadelphia, PA. 2022.
- 4) Oyanna V., Graf T.N., Oberlies N.H., Clarke J.D., Green Tea Alters Bile Acid Micellar Solubility of Raloxifene. American Society for Pharmacology and Experimental Therapeutics annual meeting, Philadelphia, PA. 2022.
- 5) Arman T., Baron J.A., Lynch K.D., Aldan J., Clarke J.D. Diet-induced nonalcoholic fatty liver disease slowed recovery of hepatic fibrosis and carcinogenic reprogramming after microcystin-LR toxicity in rats. Society of Toxicology 60th Annual Meeting, virtual, 2021.

Ms. Arman received 3rd place in the Carl C. Smith Graduate Student Award, Mechanisms Specialty Section, AND 2nd place in the Dr. Harihara Mehendale Graduate Student Best Abstract Award, Association of Scientists of Indian Origin

- 6) Arman T., Lynch K.D., Aldan J.T., Bechtold B.J., Clarke J.D. Differential hepatic recovery after sub-lethal microcystin-LR exposure in healthy versus nonalcoholic steatohepatitis rats. Society of Toxicology 59th Annual Meeting, Anaheim, CA. 2020.
- 7) Tian, D.D., Gastecki, M., Lynch, K.D., Arman, T., Paine, M.F., Clarke, J.D. Differential Effects of Silymarin on Pitavastatin Disposition in Rodent Models of Simple Fatty Liver versus Nonalcoholic Steatohepatitis: A Natural Product-Disease-Drug Interaction. American Society for Pharmacology and Experimental Therapeutics annual meeting, Orlando, FL. 2019.

Dr. Tian was selected for an oral presentation and received a travel award.

- 8) Arman, T., Lynch K.D., Gastecki, M., Goedken, M.J., Clarke, J.D. Microcystin-LR renal toxicity in nonalcoholic fatty liver disease. Society of Toxicology 58th Annual Meeting, Baltimore, MD. 2019.

Ms. Arman received 2nd place in the Renal Toxicology Award, Mechanisms Specialty Section

- 9) Clarke, J.D., Arman, T., Paine, M.F., Gastecki, M. A pharmacokinetics natural product-disease-drug interaction: A double-hit on hepatic transporters. International Society for the Study of Xenobiotics North American meeting, Montreal, QC. 2018.
- 10) Arman, T., Lynch, K.D., Gastecki, M., Goedken, M.J., Clarke, J.D. Microcystin-LR hepatic and renal toxicity in non-alcoholic fatty liver disease. Society of Toxicology 57th Annual Meeting, San Antonio, TX. 2018.
- 11) Housley, L., Clarke, J.D., Hsu, A., Ho, E. Plasma Metabolomic Profiles in Healthy Adults following Consumption of Broccoli Sprouts. *FASEB J* 29(S1): 2015.
- 12) Clarke, J.D., Hardwick, R.H., Lake, A.D., Canet, M.J., Cherrington, N.J. Experimental nonalcoholic steatohepatitis increases exposure to simvastatin hydroxy acid by decreasing hepatic organic anion transporting polypeptide expression. Society of Toxicology 54th Annual Meeting, San Diego, CA. 2015.
- 13) Clarke, J.D., Novak, P., Lake, A.D., Hardwick, R.N., Cherrington, N.J. Impaired Glycosylation and Membrane Localization of Uptake and Efflux Transporters in Human Non-Alcoholic Fatty Liver Disease. Society of Toxicology 52nd Annual Meeting, San Antonio, TX. 2013.
- 14) Clarke, J.D., Novak, P., Lake, A.D., Shipkova, P., Aranibar, N., Robertson, D., Reily, M.D., Lehman-McKeeman, L.D., Cherrington, N.J. Characterization of Hepatocellular Carcinoma Related Genes and Metabolites in Human Non-Alcoholic Fatty Liver Disease. Society of Toxicology 51st Annual Meeting, San Francisco, CA. 2012
- 15) Clarke, J.D., Riedl, K., Hsu, A. Bella, D., Schwartz, S., Hardin, K., Stevens, J.F. and Ho, E. Comparison of the response to broccoli sprouts or broccoli supplement consumption in human subjects. *FASEB J* 25:234.7: 2011.
- 16) Clarke, J.D., Yu, Z., and Ho, E. Differential effects of sulforaphane on histone deacetylases, cell cycle arrest and apoptosis in normal and prostate cancer cells. *FASEB J* 24:107.5; 2010.

INVITED ORAL PRESENTATIONS

Regional:

American Association of Pharmaceutical Scientists Rocky Mountain Discussion Group meeting (2019)

Title: Increasing the precision of precision medicine by characterizing multifactorial pharmacokinetic interactions

University of Georgia, College of Pharmacy, Pharmaceutical and Biomedical Sciences seminar (2019)

Title: Increasing the precision of precision medicine by characterizing multifactorial pharmacokinetic interactions

International:

Herbal Medicinal Products Platform Austria Scientific eSymposium (2021)

Title: Milk thistle-drug pharmacokinetic interactions in nonalcoholic steatohepatitis

Hepatocyte Transporter Network Symposium (Sept 2021)

Title: Using endogenous biomarkers for pharmacokinetic natural product-drug interactions

Canceled due to COVID-19

Gordon Research Conference on Mycotoxins and Phycotoxins (June 2021)
Canceled due to COVID-19

Food and Drug Administration and Maryland Center of Excellence in Regulatory Science and Innovation workshop, Assessing Changes in Pharmacokinetics of Drugs in Liver Disease (Oct 2020)
Title: DMET changes in progressive NAFLD: illustrations and complexities

Gordon Research Conference on Drug Metabolism (2018)
Title: Overlapping hits on drug disposition: specific populations with special populations

PROFESSIONAL SOCIETY MEMBERSHIPS

American Society for Pharmacology and Experimental Therapeutics (2017-present)

Society of Toxicology (2012-present)

International Society for the Study of Xenobiotics (2021-present)

ACADEMIC SERVICE, WASHINGTON STATE UNIVERSITY

Chair, Pharmaceutical Sciences and Molecular Medicine steering committee (2021-present)
WSU College of Pharmacy and Pharmaceutical Sciences

Member, Department of Pharmaceutical Sciences Chair search committee (2021-present)
WSU College of Pharmacy and Pharmaceutical Sciences

Member, Veterinarian Recruitment committee (2021-present)
WSU Spokane campus

Member, Honors Program committee (2021-present)
WSU College of Pharmacy and Pharmaceutical Sciences

Member, Industry Advisory Board committee (2020-present)
WSU College of Pharmacy and Pharmaceutical Sciences

Member, Summer Undergraduate Research Fellowship application review committee (2017-present)
ASPET funded program

Member, Graduate Program Admissions committee (2017-2021)
WSU Department of Pharmaceutical Sciences

Member, Pharmaceutical Sciences Master's degree exploration committee (2020)
WSU College of Pharmacy and Pharmaceutical Sciences

Pharmacy student advisor (2018-2019)
WSU College of Pharmacy and Pharmaceutical Sciences

Member, Strategic Planning committee (2018-2019)
WSU College of Pharmacy and Pharmaceutical Sciences

Member, Veterinarian Recruitment committee (2018)
WSU Spokane campus

Member, Ad-hoc post-retreat review committee (2017)
WSU College of Pharmacy

PEER REVIEW SERVICE

Ad hoc reviewer, NIH Superfund

Ad hoc reviewer, NIH Xenobiotic and Nutrient Disposition and Action study section (Oct 2019, Oct 2020, July 2021)

Guest editor, Toxins, special issue (July 2021)

Title: Hepatotoxin exposures, molecular mechanisms, and implications for liver disease

Editorial Board member, Toxicological Sciences (2017-present)

Ad hoc journal reviewer:

Biological Chemistry
British Journal of Pharmacology
Chemico-Biological Interactions
Clinical Pharmacokinetics
Clinical Pharmacology and Therapeutics
Drug Metabolism and Disposition
Expert Opinion on Drug Metabolism and Toxicology
Journal of Applied Toxicology
Journal of Pharmacology and Experimental Therapeutics
Medicinal Research Reviews
Molecular and Cell Biology of Lipids
Molecular Pharmacology
PLOS One
Science of the Total Environment
Science Translational Medicine
Toxicology In Vitro
Toxicology Letters
Toxins

TEACHING AND MENTORING EXPERIENCE

Washington State University, CPPS, Spokane, Washington

Integrated Pharmacology II, PharmD course (2020-present); Co-instructor; 6 contact hrs

Principles of Pharmacology, PhD course (2019-present); Co-instructor of Record; 15 contact hrs

Fundamentals of Toxicology, PhD course (2018-present); Co-instructor; 5 contact hrs

University of Arizona, College of Pharmacy, Tucson, Arizona

Cell Signaling, PCOL 630a, PhD course (2014, 2015); 3 contact hrs

General and Systems Toxicology, PCOL 602a, PhD course (2013, 2014); 2 contact hrs

Oregon State University, Corvallis, Oregon (2008)

Teaching assistant, NFM 418/518, Micronutrients

Teaching assistant, Microbiology 417, Immunology lab

Graduate Students

Victoria Oyanna, WSU Pharmaceutical Sciences Doctoral student (2019-present)

Baron Bechtold, WSU Pharmaceutical Sciences Doctoral student (2018-present)

Tarana Arman, WSU Pharmaceutical Sciences Doctoral student (2016-2021)

Rotation students

Anoud Ailabouni, WSU Pharmaceutical Sciences Doctoral student (Spring 2022)

Meena Shanta, WSU Pharmaceutical Sciences Doctoral student (Fall 2021)

Sean McGranaghan, WSU Pharmaceutical Sciences Doctoral student (Spring 2021)

Joshua Gallo, WSU Pharmaceutical Sciences Doctoral student (Spring 2020)

Theresa Low, WSU Pharmaceutical Sciences Doctoral student (Fall 2018)

Pravita Balijepalli, WSU Pharmaceutical Sciences Doctoral student (Fall 2017)

Dissertation committees

Tobias Johnson, WSU Pharmaceutical Sciences (2021-present)
Deepak Ahire, WSU Pharmaceutical Sciences (2020-present)
Shelby Coates, WSU Pharmaceutical Sciences (2020-present)
Rakshit Tanna, WSU Pharmaceutical Sciences (2019-present)
Irina Teslenko, WSU Pharmaceutical Sciences (2018-present)
Ana Vergara, WSU Pharmaceutical Sciences (2019-2020)
Yadira Perez Paramo, WSU Pharmaceutical Sciences (2017-2020)

Doctor of Pharmacy Students

Kenisha Garcia-Torres, WSU CPPS PharmD Student (2021-present)
Monica Sines, WSU CPPS PharmD student (2019)
Christopher Morales, WSU CPPS PharmD student (2019)
Tyler Hogan, WSU CPPS PharmD student (2018)

Postdoctoral Scholars

J. Allen Baron, PhD (2019-2020)

Research Interns

M. Ridge Call, WSU CPPS (2021-present)
Dayne Iverson, WSU CPPS (2021-present)
Johnny Aldan, WSU CPPS (2019-2020)

Undergraduate StudentsWashington State University

M. Ridge Call, BYU-Idaho (Summer Undergraduate Research Fellowship (SURF) program, 2021)
Kristen Campbell, BYU-Idaho (SURF program, 2018)
Yusheng (Sunny) Wu, Wheaton College (SURF program, 2017)

University of Arizona

Craig Covington, pre-dental major (2013-2015)
Mitchell Welton, pre-pharmacy (2013)
Nick Nelson, Senior thesis project (2012-2013)

Oregon State University

Luke Snelling, Undergraduate Research Awards Program Winner (2009-2010)
Ryan Haran, Undergraduate Research Awards Program Winner (2008-2009)

High School Students

University of Arizona, Keep Engaging Youth in Science (KEYS)
Samantha Werts (2013)
Christian Daahir (2012)

Host incoming Oregon State University Molecular and Cellular Biology PhD applicants (2007-2010)

Involved in recruitment weekend activities and maintaining contact with applicant to facilitate a smooth transition into the program.

PROFESSIONAL SERVICE AND DEVELOPMENT**Pacific Northwest Association of Toxicologists Presidential chair (2021-present)**

Regional Chapter of The Society of Toxicology

Data Analysis & Modeling with R (Winter 2022)

University of Washington CE course (4 credits)

Introduction to Statistical Analysis with R (Fall 2021)

University of Washington CE course (4 credits)

Mechanisms Specialty Section Senior Councilor (2020-2021)

The Society of Toxicology

Symposium Organizer and Chair (2019)

The Society of Toxicology Annual meeting, Baltimore, MD:

“Explicating the pathogenic environmental factors in nonalcoholic fatty liver disease”

Mechanisms Specialty Section Junior Councilor (2019-2020)

The Society of Toxicology

Gordon Research Conference on Drug Metabolism: Academia vs. Industry softball MVP ☺

(2018)

Coaches voting, Holderness New Hampshire

Carl C. Smith Graduate Student award abstract reviewer (Oct 2017, Oct 2018)

Mechanisms Specialty Section, The Society of Toxicology

Workshop/colloquium attendance:

Joint NIEHS Core Centers and Training Directors Meeting (Apr 2015)

Tucson, Arizona

Southwest Environmental Health Sciences Center (SWEHSC) Colloquium (Sept 2012)

Monthly meetings sponsored by the SWEHSC

Complex Disease Biology Colloquium (Jan-April 2012)

Sponsored by the Arizona Center of Complex Diseases

Environmental Toxicology Colloquium (Jan-May 2012)

Sponsored by The University of Arizona NIEHS training grant

Councilor for the Postdoctoral Association Executive Board (2014-2015)

The Society of Toxicology

Mechanisms Specialty Section Postdoctoral Representative (2012-2013)

The Society of Toxicology

SWEHSC community outreach volunteer (Spring 2013)

Assist Dr. Marti Lindsey at the San Xavier Mission School