Sam Harirforoosh

Professor

Department of Biomedical and Pharmaceutical Sciences Chapman University School of Pharmacy (CUSP)

> Phone: 714-516-5667 E-mail: harirforoosh@chapman.edu Google Scholar Citations

Web of Science Reviewer Recognition Services Peer Review Profile

EDUCATION

PhD, Pharmaceutical Sciences (Pharmacokinetics), University of Alberta, 2005 PharmD, Tehran University of Medical Sciences, 1991

TEACHING AND RESEARCH EXPERIENCE

Instructional Professor, August 2022 - present Department of Biomedical and Pharmaceutical Sciences School of Pharmacy Chapman University Irvine, California 92618

Professor (Tenured), July 2019 - Aug 2022 Department of Pharmaceutical Sciences Gatton College of Pharmacy East Tennessee State University (ETSU) Johnson City, Tennessee 37614

Associate Professor (Tenured), July 2013 - June 2019 Department of Pharmaceutical Sciences Gatton College of Pharmacy East Tennessee State University Johnson City, Tennessee 37614

Assistant Professor, July 2007 - June 2013 Department of Pharmaceutical Sciences Gatton College of Pharmacy East Tennessee State University Johnson City, Tennessee 37614

Research Assistant/Post-doctoral Fellow, June 2005 - May 2006 Pulmonary Research Group, Department of Medicine, Heritage Medical Research Centre University of Alberta Edmonton, Alberta, Canada

Teaching Assistant (Pharmaceutics), 2001 - 2003 Faculty of Pharmacy and Pharmaceutical Sciences University of Alberta Edmonton, Alberta, Canada

COURSES TAUGHT

PharmD Program, CUSP

Biopharmaceuticals

Fall 2024, 12 hours, Course coordinator and lecturer

Fall 2023, 12 hours, Lecturer

Fall 2022, 12 hours, Lecturer

Principles of Drug Action

Fall 2024, 12 hours, Lecturer

Fall 2023, 12 hours, Lecturer

Fall 2022, 12 hours, Lecturer

Drug Delivery Systems II

Spring 2025, 18 hours, Course co-coordinator and lecturer

Spring 2024, 18 hours, Course co-coordinator and lecturer

Spring 2023, 24 hours, Course coordinator and lecturer

Drug Delivery Systems I Laboratory

Spring 2025, 84 hours, Instructor

Spring 2024, 84 hours, Instructor

Spring 2023, 84 hours, Instructor

Integrated Therapeutics: Cardiology

Summer 2025, Lecturer

Summer 2024, 10 hours, Lecturer

Summer 2023, 10 hours, Lecturer

Integrated Therapeutics: Infectious Diseases II

Summer 2025, Lecturer

Summer 2024, 18 hours, Lecturer

Summer 2023, 18 hours, Lecturer

Integrated Therapeutics: Gastroenterology

Spring 2023, 20 hours, Course co-coordinator and lecturer

Integrated Therapeutics: Dermatologic and Rheumatologic Disorders

Summer 2023, 10 hours, Lecturer

Veterinary Pharmacy (Elective Course)

Summer 2025. Course coordinator and lecturer Fall 2024, 14 hours, Course coordinator and lecturer Summer 2024, 14 hours, Course coordinator and lecturer Fall 2023, 14 hours, Course coordinator and lecturer Summer 2023, 14 hours, Course coordinator and lecturer

Individual Study and Research (Elective Course)

Spring 2025, Instructor Fall 2024, Instructor Summer 2024, Instructor Spring 2024, Instructor Fall 2023, Instructor Summer 2023, Instructor

Graduate Program, CUSP

Advanced Principles of Drug Action

Spring 2025, 18 hours, Course co-coordinator and lecturer Spring 2024, 16 hours, Course co-coordinator and lecturer Spring 2023, 16 hours, Course co-coordinator and lecturer

Drug Discovery and Development

Fall 2024, 11 hours, Lecturer Fall 2023, 9 hours, Lecturer Fall 2022, 9 hours, Lecturer

Introduction to Pharmaceutical Manufacturing Processes

Spring 2024, 19.5 hours, Lecturer

PharmD Program, ETSU

Pharmacokinetics & Pharmacogenomics

Fall 2021, 42 hours, Course coordinator and lecturer Fall 2020, 54 hours, Course coordinator and lecturer Fall 2019, 54 hours, Course coordinator and lecturer Fall 2018, 55 hours, Course coordinator and lecturer Fall 2017, 62 hours, Course coordinator and lecturer Fall 2016, 57 hours, Course coordinator and lecturer Fall 2015, 62 hours, Course coordinator and lecturer Fall 2014, 62 hours, Course coordinator and lecturer Fall 2013, 60 hours, Course coordinator and lecturer Fall 2012, 62 hours, Course coordinator and lecturer Fall 2011, 62 hours, Course coordinator and lecturer Fall 2010, 64 hours, Course coordinator and lecturer Fall 2009, 62 hours, Course coordinator and lecturer Fall 2008, 56 hours, Course coordinator and lecturer Fall 2007, 68 hours, Course coordinator and lecturer

IDEALS II (Compounding and Dispensing Lab)

Spring 2022, 43 hours, Course coordinator and instructor

Integrated Series IV – Renal

Spring 2022, 2 hours, Lecturer

Spring 2021, 2 hours, Lecturer

Spring 2020, 2 hours, Lecturer

Spring 2019, 2 hours, Lecturer

Spring 2018, 2 hours, Lecturer

Spring 2017, 2 hours, Lecturer

Spring 2016, 2 hours, Lecturer

Spring 2015, 2 hours, Lecturer

Biopharmaceutics and Biotechnology

Spring 2018, 5 hours, Lecturer

Pharmaceutics and Biopharmaceutics

Spring 2013, 5 hours, Lecturer

Spring 2012, 5 hours, Lecturer

Spring 2011, 27 hours, Lecturer

Spring 2010, 32 hours, Lecturer

Spring 2009, 38 hours, Lecturer

Spring 2008, 38 hours, Course coordinator and lecturer

Compounding and Dispensing Lab

Spring 2012, 6 hours, Instructor

Spring 2011, 8 hours, Instructor

Spring 2008, 4 hours, Instructor

Summer 2007, 16 hours, Instructor

Communication Skills

Fall 2007, 23 hours, Instructor

Research/Drug Development (APPE Research Rotation)

Summer 2020, Preceptor

Writing a Pharmaceutical Sciences Research Manuscript (APPE Research Rotation)

Spring 2015, Preceptor

Capstone Experience in Pharmaceutical Research

Fall 2020, Mentor

Fall 2019, Mentor

Non-Medicinal Drug Use (Elective Course)

Spring 2022, 2 hours, Lecturer Spring 2021, 2 hours, Lecturer Spring 2020, 2 hours, Lecturer Spring 2019, 2 hours, Lecturer Spring 2018, 2 hours, Lecturer Spring 2017, 2 hours, Lecturer Spring 2016, 2 hours, Lecturer Fall 2014, 2 hours, Lecturer Spring 2013, 2 hours, Lecturer Spring 2012, 2 hours, Lecturer Spring 2011, 2 hours, Lecturer Fall 2009, 2 hours, Lecturer

Pharmaceutical Sciences Research I (Elective Courses)

Fall 2011, spring 2012, spring 2014, fall 2016, spring 2107, spring 2018, fall 2018, spring 2019

Pharmaceutical Sciences Research II (Elective Courses)

Fall 2011, fall 2012, spring 2012, fall 2014, spring 2014, summer 2014, spring 2017, fall 2017, fall 2018, spring 2019

Pharmaceutical Sciences Research III (Elective Courses)

Fall 2012, spring 2013, fall 2014, spring 2015, fall 2017, spring 2018, fall 2018, summer 2019

Pharmaceutical Sciences Research IV (Elective Courses)

Spring 2015, spring 2018, spring 2019, fall 2019

Pharmaceutical Sciences Research V (Elective Courses)

Spring 2020

Graduate Program, ETSU

Advanced Pharmacokinetics

Spring 2015, 36 Hours, Course coordinator and lecturer Spring 2013, 36 Hours, Course coordinator and lecturer

Advanced Drug Metabolism

Spring 2014, 36 Hours, Course coordinator and lecturer

Special Problems in Pharmacokinetics and Pharmacogenomics (Elective Course)

Spring 2010, spring 2011, summer 2016

General Principles of Pharmacology

Summer 2010, 17 Hours, Lecturer

RESEARCH AND SCHOLARSHIP

Research Interests

Predicting Pharmacokinetic Outcomes through Artificial Intelligence Pharmacokinetic/Pharmacodynamic Modeling Pharmacogenomics Cardiovascular and Renal Adverse Effects of Drugs Nanoparticle Formulation of Drugs

Research Projects

Sam Harirforoosh (Principal Investigator) and Steven Smith (Co-Investigator): Research and Development Committee Major Grant, Tennessee State University. A pilot study to investigate cardiovascular adverse effects of a class of pain relievers; 2016, \$10,000

Darshan Shah (Principal Investigator), Stacy D. Brown (Co-Investigator), and Sam Harriforoosh (Co-Investigator): Correlation of Newborn's Clinical Course with Infant's Drug Testing and Maternal Drug Use; 2017

Sam Harirforoosh (Principal Investigator): Research and Development Committee Major Grant, East Tennessee State University. Reformulation and evaluation of an antidiabetic agent to reduce renal side effects; 2018-2019, \$10,000 Supported in part by a Student-Faculty Collaborative grant from the Office of Undergraduate Research & Creative Activities, ETSU Honors College, \$1,200

Sam Harirforoosh (Principal Investigator): Research and Development Committee Small Grant, East Tennessee State University. Design and Evaluation of a New Formulation of an Antihypertensive Drug; 2018, \$1,500 Supported in part by a Student-Faculty Collaborative grant from the Office of Undergraduate Research & Creative Activities, ETSU Honors College, \$1,200

David Hurley (Principal Investigator) and Sam Harirforoosh (Co-Investigator): Research and Development Committee Major Grant, East Tennessee State University. Personal Pharmacogenomic (PGx) analysis, problem-solving and research for firstyear Pharmacy students; 2018, \$10,000

Sam Harirforoosh (Principal Investigator), Jonathan Moorman (Co-Investigator), Michelle Duffourc (Co-Investigator), Kesheng Wang (Co-Investigator), and David Cluck (Co-Investigator): Research and Development Committee Interdisciplinary Grant (a competitive and peer-reviewed program), East Tennessee State University. How Stribild action as an HIV antiretroviral drug is affected by genetic variations among patients; 2015-2017, \$50,000

Supported in part by an ETSU School of Graduate Studies Student Research Grant to Derek Murrell (PhD student), \$800

Rick Hess (Principal Investigator), John Bossaer (Co-Investigator), Sam Harriforoosh (Co-Investigator), James Thigpen (Co-Investigator), and Adam Welch (Co-Investigator): Validation of an OSCE Pilot to Assess Pre-APPE Readiness; 2019-2020

Sam Harirforoosh (Principal Investigator): Gatton College of Pharmacy, Department of Pharmaceutical Sciences Faculty Startup Funds. Genetic Polymorphisms as Risk Factors for Type 2 Diabetes Development; 2018-2020

Rick Hess (Principal Investigator), John Bossaer (Co-Investigator), Sam Harriforoosh (Co-Investigator), and Adam Welch (Co-Investigator): The Development and Validation of an OSCE Assessment to Measure Student Pharmacist Competencies of Pre-APPE Domains; 2018-2019

Sam Harirforoosh (Principal Investigator): Research and Development Committee Small Grant (a competitive and peer-reviewed program), East Tennessee State University. Influence of a Formulation Modification on Relative Bioavailability of Aliskiren; 2015, \$1,470

Supported in part by a Student-Faculty Collaborative grant from the Office of Undergraduate Research & Creative Activities, ETSU Honors College, \$1,200

Victoria Palau (Principal Investigator) and **Sam Harirforoosh** (Key Personnel): Pharmacokinetics of two flavone isomers derived from Gnaphalium elegans and Achyrocline bogotensis; 2014-2015

Sam Harirforoosh (Principal Investigator): Research and Development Committee Major Grant (a competitive and peer-reviewed program), East Tennessee State University. Reformulating pharmaceutical delivery methods for pain relievers to reduce secondary kidney damage; 2012-2015, \$10,000

Sam Harirforoosh (Principal Investigator): Research and Development Committee Small Grant, East Tennessee State University. NSAIDs-induced cardiovascular and renal side effects: a meta-analysis; 2013-2015, \$1,430

Sam Harirforoosh (Principal Investigator): Gatton College of Pharmacy, Department of Pharmaceutical Sciences Faculty Startup Funds. Formulation of niacin loaded PLGAbased nanoparticles; 2014

Sam Harirforoosh (Principal Investigator): Gatton College of Pharmacy, Department of Pharmaceutical Sciences Faculty Startup Funds. Effect of misoprostol co-administration on cardiorenal toxicity of celecoxib in rats; 2011-2013

Sam Harirforoosh (Principal Investigator): Research and Development Committee Small Grant, East Tennessee State University & Department of Pharmaceutical Sciences Faculty Startup Funds. The effect of a mucosal-protective agent on disposition of two analgesics; 2011, \$1,500

Sam Harirforoosh (Principal Investigator): Research and Development Committee Major Grant, East Tennessee State University (2010-2011). Toxicity of pain relievers: effects of rebamipide on NSAID-induced kidney damage in rats; 2010-2011, \$9,500

Technical Skills

Software:

- Expert knowledge of WinNonlin, SAS, SPSS, Minitab, GraphPad
- Working knowledge of NONMEM, GastroPlus

Instruments:

- Expert knowledge of High-Performance Liquid Chromatography, Nanoparticle **Analysis**
- Working knowledge of Liquid Chromatography–Mass Spectrometry, Spectrophotometry, Blood Gas Analysis

Technologies:

- Expert knowledge of technologies applied for pharmacogenomic testing
- Working knowledge of ELISA and Western Blot tests, Drug Metabolism assays

Peer-Reviewed Publications

45. Derek E. Murrell, Benjamin C. Kennard, Maria E. Bertoni, David B. Cluck, Stacy D. Brown, Jonathan P. Moorman, Ke-Sheng Wang, Michelle M. Duffourc, and Sam Harirforoosh. 2025. An Exploratory Pharmacogenetic Pilot Study of Two Reverse Transcriptase Inhibitors, Tenofovir Alafenamide Fumarate and Tenofovir Disoproxil Fumarate. *Drugs in R&D* https://doi.org/10.1007/s40268-025-00509-6

- 44. Russell W. Fankhouser, Derek E. Murrell, Yaa Anane, David L. Hurley, Hadii Mamudu, and Sam Harirforoosh. 2022. Type 2 Diabetes: An Exploratory Genetic Association Analysis and Effects on Cardiovascular and Renal Biomarkers. Drug Metabolism and Personalized Therapy https://doi.org/10.1515/dmpt-2021-0135
- 43. Enaholo Omoike, Timir Paul, Stanley Ridner, Manul Awasthi, Sam Harirforoosh, and Hadii Mamudu. 2019. Association between smoking status and homocysteine levels and possible effect modification by cholesterol and estradiol. *Biomarkers* https://doi.org/10.1080/1354750X.2019.1705395

- 42. David Roane and Sam Harirforoosh. 2019. De-Conflating Religiosity/Spirituality. American Journal of Pharmaceutical Education. 83:7 http://www.ajpe.org/doi/pdf/10.5688/ajpe7646
- 41. Jim Thigpen, Brian Odle, and Sam Harirforoosh. 2019. Opioids: A review of pharmacokinetics and pharmacodynamics in neonates, infants, and children. European Journal of Drug Metabolism and Pharmacokinetics. 44: 591-609 https://doi.org/10.1007/s13318-019-00552-0
- 40. Brooks B. Pond, Stacy D. Brown, David W. Stewart, David S. Roane, and Sam Harirforoosh. 2019. Faculty Applicants Attempt to Inflate CVs Using Predatory Journals. American Journal of Pharmaceutical Education. 83: 12-14 https://www.ajpe.org/doi/pdf/10.5688/ajpe7210
- **39.** Derek E. Murrell, David B. Cluck, Jonathan P. Moorman, Stacy D. Brown, Ke-Sheng Wang, Michelle M. Duffourc, and Sam Harirforosh. 2019. HIV Integrase Inhibitor Pharmacogenetics: An Exploratory Study. Clinical Drug Investigation. 39: 285-299 https://doi.org/10.1007/s40261-018-0739-9
- 38. Derek Murrell, Jessica M. Coleman, Stacy D. Brown, and Sam Harirforoosh. 2018. Formulation and in vivo Evaluation of Aliskiren-loaded Poly(lactic-co-glycolic) Acid Nanoparticles. Toxicology Research and Application. 2: 1–11 https://doi.org/10.1177/2397847318801155
- 37. Hadii M. Mamudu, Pooja Subedi, Timir Paul, Ali E. Alamin, Arsham Alamian, Liang Wang, David Stewart, Antwan Jones, Sam Harirforoosh, Gerald Blackwell, and Matthew Budoff. 2018. The associated risk factors for coronary artery calcium in asymptomatic patients with and without diabetes in rural Central Appalachia. Diabetes and its Complications. 32: 900-905 https://doi.org/10.1016/j.jdiacomp.2018.07.006
- 36. Aaron J. Salwan, Nicholas E. Hagemeier, and Sam Harirforoosh. 2018. Abuse-Deterrent Opioid Formulations: A Key Ingredient in the Recipe to Prevent Opioid Disasters? Clinical Drug Investigation. 38: 573–577 http://doi.org/10.1007/s40261-018-0651-3
- 35. Yang Chen, Chun Xu, Sam Harirforoosh, Xingguang Luo, and Ke-Sheng Wang. **2018.** Analysis of *PTPRK* polymorphisms in association with risk and age at onset of Alzheimer's disease, cancer risk, and cholesterol. *Journal of Psychiatric Research*. 96: 65-72

http://dx.doi.org/10.1016/j.jpsychires.2017.09.021

34. Regan E. Sevinsky, David W. Stewart, and Sam Harirforoosh. 2017. Non-Steroidal Anti-Inflammatory Drugs: Is There a Link between Cardiovascular and Renal Adverse Effects? Journal of Integrative Nephrology and Andrology, 4:1-2

http://dx.doi.org/10.4103/jina.jina 2 17

33. Bryan R. Gunter, Kristen A. Butler, Richard L. Wallace, Steven M. Smith, and Sam Harirforoosh. 2017. Non-steroidal anti-inflammatory drug-induced cardiovascular adverse events: a meta-analysis. Journal of Clinical Pharmacy and Therapeutics. 42: 27-38

http://dx.doi.org/10.1111/jcpt.12484

32. Crystal L. Whitted, Victoria E. Palau, Ruben D. Torrenegra, Oscar E. Rodriguez, and Sam Harirforoosh. 2017. Quantification of two isomeric flavones in rat colon tissue using reverse phase high performance liquid chromatography. BMC Research Notes. 10: 29

http://dx.doi.org/10.1186/s13104-016-2358-y

- 31. Daniel Owusu, Yue Pan, Changchun Xie, Sam Harirforoosh, and Ke-Sheng Wang. **2017**. Polymorphisms in *PDLIM5* gene are associated with alcohol dependence, type 2 diabetes, and hypertension. Journal of Psychiatric Research. 87: 27-34 http://dx.doi.org/10.1016/j.jpsychires.2016.09.015
- 30. Derek E. Murrell, Ronald L. Carico, John B. Bossaer, Sam Harirforoush, and David B. Cluck. 2017. Isavuconazonium sulfate: a triazole prodrug for invasive fungal infections. *International Journal of Pharmacy Practice*. 25: 18-30 http://dx.doi.org/10.1111/ijpp.12302
- 29. Sam Harirforoosh, Kelsi O. West, Derek E. Murrell, James W. Denham, Peter C. Panus, and Greg A. Hanley. 2016. Examination of the Pharmacodynamics and Pharmacokinetics of a Diclofenac Poly(lactic-co-glycolic) Acid Nanoparticle Formulation in the Rat. European Review for Medical and Pharmacological Sciences. 20: 5021-5031
- 28. Sam Harirforoosh, Kelsi O. West, Derek E. Murrell, James W. Denham, Peter C. Panus, and Gregory A. Hanley. **2016.** Assessment of Celecoxib Poly(lactic-co-glycolic) Acid Nanoformulation on Drug Pharmacodynamics and Pharmacokinetics in Rats. European Review for Medical and Pharmacological Sciences. 20: 4818-4829
- 27. Sam Harirforoush and David W. Stewart. 2016. A descriptive investigation of the impact of student research projects arising from elective research courses. BMC Research *Notes.* 9: 48

http://dx.doi.org/10.1186/s13104-016-1865-1

26. Derek E. Murrell and **Sam Harirforoosh**. **2016**. Improving the renal profile of a HIV drug combination through prodrug alteration. Journal of Integrative Nephrology and Andrology. 3:1-2

http://dx.doi.org/10.4103/2394-2916.175388

- 25. Dustin L. Cooper, Jennifer A. Carmical, Peter C. Panus, and Sam Harirforoosh. 2015. Formulation and in vitro evaluation of niacin-loaded nanoparticles to reduce prostaglandin mediated vasodilatory flushing. European Review for Medical and Pharmacological Sciences. 19: 3977-3988
- 24. Derek E. Murrell, Yuyun Rahmasari, James W. Denham, Peter C. Panus, and Sam Harirforoosh. 2015. Celecoxib or diclofenac hepatic status in the presence or absence of rebamipide. European Review for Medical and Pharmacological Sciences. 19: 3318-3325
- 23. Crystal Whitted, Victoria E. Palau, Ruben D. Torrenegra, and Sam Harirforoosh. **2015**. Development of reversed-phase high performance liquid chromatography methods for quantification of two isomeric flavones and the application of the methods to pharmacokinetic studies in rats. Journal of Chromatography B. 1001: 150-155 http://dx.doi.org/10.1016/j.jchromb.2015.07.039
- 22. Uta B. Schambra, Jeff Goldsmith, Kevin Nunley, Yali Liu, Sam Harirforoosh, and Heidi M. Schambra. 2015. Low and moderate prenatal ethanol exposure of mice during gastrulation or neurulation delays neurobehavioral development. Neurotoxicology and *Teratology.* S0892-0362(15)30012-X http://dx.doi.org/10.1016/j.ntt.2015.07.003
- 21. Derek E. Murrell, James W. Denham, and Sam Harirforosh. 2015. Histopathology and Oxidative Stress Analysis of Concomitant Misoprostol and Celecoxib Administration. Journal of Toxicologic Pathology. 28: 165–170 http://doi.org/10.1293/tox.2015-0016
- 20. Dustin L. Cooper, Derek E. Murrell, David S. Roane, and Sam Harirforoush. 2015. Effects of formulation design on niacin therapeutics: mechanism of action, metabolism, and drug delivery. International Journal of Pharmaceutics. 490: 55-64 http://dx.doi.org/10.1016/j.ijpharm.2015.05.024
- 19. Derek E. Murrell, Jonathan P. Moorman, and Sam Harirforoosh. 2015. Stribild: a review of component characteristics and combination drug efficacy. European Review for Medical and Pharmacological Sciences. 19: 904-914
- 18. Dustin L. Cooper and Sam Harirforosh. 2014. Effect of formulation variables on preparation of celecoxib loaded polylactide-co-glycolide nanoparticles. PLoS ONE. 9(12): e113558 http://dx.plos.org/10.1371/journal.pone.0113558
- 17. Dustin L. Cooper, Christopher M. Conder, and Sam Harirforoosh. 2014. Nanoparticles in Drug Delivery: Mechanism of Action, Formulation, and Clinical Application towards Reduction in Drug Associated Nephrotoxicity. Expert Opinion on *Drug Delivery*. 11: 1661-1680

http://dx.doi.org/10.1517/17425247.2014.938046

- 16. Majid Moridani and Sam Harirforoosh. 2014. Drug Development and Discovery: Challenges and Opportunities. *Drug Discovery Today*. S1359-6446(14)00237-2 http://dx.doi.org/10.1016/j.drudis.2014.06.003
- 15. Dustin L. Cooper and Sam Harirforoosh. 2014. A simple high performance liquid chromatography method for determination of rebamipide in rat urine. Methods X. 1: 49-55 http://dx.doi.org/10.1016/j.mex.2014.06.002
- 14. Dustin L. Cooper and Sam Harirforoosh. 2014. Design and Optimization of PLGA-Based Diclofenac Loaded Nanoparticles. *PLoS ONE*. 9(1): e87326. http://dx.plos.org/10.1371/journal.pone.0087326
- 13. Dustin L. Cooper, Derek E. Murrell, Christopher M. Conder, Victoria P. Palau, Grace E. Campbell, Shaun P. Lynch, Angela V. Hanley, Kenny W. Bullins, James W. Denham, Peter C. Panus, Krishna Singh, and Sam Harirforoosh. 2014. Exacerbation of celecoxibinduced renal injury by concomitant administration of misoprostol in rats. *PLoS ONE*. 9(2): e89087.

http://dx.plos.org/10.1371/journal.pone.0089087

- 12. Dustin L. Cooper, Robert C. Wood III, Jarrett E. Wyatt, and Sam Harirforoosh. 2014. Pharmacokinetic interactions between rebamipide and selected nonsteroidal antiinflammatory drugs in Rats. European Journal of Pharmaceutical Sciences. 53: 28-34 http://dx.doi.org/10.1016/j.ejps.2013.12.002
- 11. Sam Harirforoosh, Waheed Asghar, and Fakhreddin Jamali. 2013. Adverse Effects of Nonsteroidal Anti-inflammatory Drugs: An update of Gastrointestinal, Cardiovascular, and Renal Complications. Journal of Pharmacy & Pharmaceutical Sciences. 16: 821-847
- 10. Robert C. Wood III, Jarrett E. Wyatt, Kenny W. Bullins, Angela V. Hanley, Gregory A. Hanley, James W. Denham, Peter C. Panus, and Sam Harirforoosh. 2013. Effects of rebamipide on nephrotoxicity associated with selected NSAIDs in rats. European Journal of Pharmacology. 720: 138-146 http://dx.doi.org/10.1016/j.ejphar.2013.10.035
- 9. Jarrett E. Wyatt, Wesley L. Pettit, and Sam Harirforoosh. 2012. Pharmacogenetics of nonsteroidal anti-inflammatory drugs. The Pharmacogenomics Journal. 12: 462-467 http://dx.doi.org/10.1038/tpj.2012.40
- 8. Christan M. Thomas, Robert C. Wood, Jarrett E. Wyatt, Morgan H. Pendleton, Oscar E. Rodrigues, Ruben D. Torrenegra, Sam Harirforoosh, Maria Ballester, Janet Lighter, Kanishka Chakraborty, and Victoria P. Ramsauer. 2012. Anti-neoplastic activity of two flavone isomers derived from Gnaphalium elegans and Achyrocline bogotensis. *PLoS* ONE. 7(6): e39806

http://dx.plos.org/10.1371/journal.pone.0039806

- 7. David G. Menter, Victoria P. Ramsauer, Sam Harirforoosh, Kanishka Chakraborty, Peiying Yang, Linda Hsi, Robert A. Newman, and Koyamangalath Krishnan. 2011. Differential effects of pravastatin and simvastatin on the growth of tumor cells from different organ sites. PLoS ONE. 6(12): e28813 http://dx.plos.org/10.1371/journal.pone.0028813
- 6. Sam Harirforoosh, John B. Bossaer, Stacy D. Brown, Brooks B. Pond, Victoria P. Ramsauer, and David S. Roane. 2011. Plagiarism among applicants for faculty positions. American Journal of Pharmaceutical Education. 75: 211 http://dx.doi.org/10.5688/ajpe7510211
- 5. Sam Harirforoosh, Lawrence Fleckenstein, Pramod Mahajan, Okezie I. Aruoma, Ying Huang, and Majid Moridani. 2009. The importance of including topics related to pharmacogenetics, pharmacogenomics and medical genetics in pharmacy curriculum. American Journal of Pharmaceutical Education. 73: 114 http://dx.doi.org/10.5688/aj7306114
- 4. Sam Harirforoosh and Fakhreddin Jamali. 2009. Renal adverse effects of nonsteroidal anti-inflammatory drugs. Expert Opinion on Drug Safety. 8: 669-681 http://dx.doi.org/10.1517/14740330903311023
- 3. Sam Harirforoosh and Fakhreddin Jamali. 2008. Effect of inflammation on kidney function and pharmacokinetics of COX-2 selective nonsteroidal anti-inflammatory drugs rofecoxib and meloxicam. Journal of Applied Toxicology. 28: 829-838 http://dx.doi.org/10.1002/jat.1342
- 2. Sam Harirforoosh, Ali Aghazadeh-Habashi, and Fakhreddin Jamali. 2006. Extent of renal effects of nonsteroidal anti-inflammatory drugs is pharmacokinetic-dependent. Clinical and Experimental Pharmacology and Physiology. 33: 917-924 http://dx.doi.org/10.1111/j.1440-1681.2006.04464.x
- 1. Sam Harirforoosh and Fakhreddin Jamali. 2005. Effect of nonsteroidal antiinflammatory drugs with varying extent of COX-2/COX-1 selectivity on urinary sodium and potassium excretion in the rat. Canadian Journal of Physiology and Pharmacology. 83: 85-90

http://dx.doi.org/10.1139/y04-129

Manuscript under Review or Revision

Amelia Monfared, Derek E. Murrell, Darshan S. Shah, Melissa Hoang, Stacy D. Brown, and Sam Harirforoosh. Pharmacogenetic Exploration of Buprenorphine and Related Metabolites in Umbilical Cord Blood (Under review by *Toxicology Reports*)

Derek E. Murrell and Sam Harirforoosh. Clinical Pharmacokinetics. Pharmacodynamics, and Drug Interactions of Remimazolam. (Under review by the European Journal of Drug Metabolism and Pharmacokinetics)

Non-Peer-Reviewed Publications

Derek E. Murrell and Sam Harirforoosh. 2013. Efavirenz Pharmacogenomics: Progress toward Successful Personalized Medicine. PGx Highlights (Pharmacogenomics Focus Group Newsletter, American Association of Pharmaceutical Scientists). 5:2-3.

Christopher M. Conder, Charles C. Collins, and Sam Harirforosh. 2013. Pharmacogenomic Considerations in Vitamin D Deficiency. PGx Highlights. 5:6-7.

Dustin L. Cooper and Sam Harirforoosh. 2013. Pharmacogenomics and Testosterone Replacement Therapy: The Role of Androgen Receptor Polymorphism. *PGx Highlights*. 5:10-11.

Presentations

- 84. Lorena Brady and Sam Harirforoosh. Evaluating the Capabilities of an Artificial Intelligence Tool in Calculating Pharmacokinetic Parameters of Acetaminophen (poster presentation). 9th International Congress on Neuropathic Pain. Berlin, Germany. September 2025 (Accepted)
- 83. Sam Harirforoosh and Jayesh Jani. Pharmacokinetic Parameters of Acetaminophen Computed by a Traditional Software Program in Comparison to Those Calculated by an Artificial Intelligence Tool (poster presentation). 9th International Congress on Neuropathic Pain. Berlin, Germany. September 2025 (Accepted)
- 82. Amelia Monfared, Melissa Hoang, Derek E. Murrell, Darshan S. Shah, Stacy D. Brown, Cara L. Carter, Lauren E. Dickerson, and Sam Harirforoosh. Analyzing the Association Between Single Nucleotide Polymorphisms and Combinations of Buprenorphine and Associated Metabolite Concentrations (poster presentation). 2024 American College of Clinical Pharmacology Annual Meeting. Bethesda, MD. September 2024

(Selected as the winner of the Dr. Elliot S. Vesell Award presented to the top Student Abstract in the area of Pharmacogenomics)

- 81. Edward Daniel, Yaseman Jahromi, and Sam Harirforoosh. Capability of Various Artificial Intelligence Software in the Calculation of Pharmacokinetic Parameters (poster presentation). Western Pharmacy Exchange. Las Vegas, Nevada. April 2024
- 80. Russell W. Fankhouser, Lauren E. Dickerson, Cara L. Carter, Derek E. Murrell, Darshan S. Shah, Stacy D. Brown, and Sam Harirforoush. An exploratory examination of association of catechol-O-methyltransferase gene variants and neonatal abstinence syndrome outcomes (poster presentation). 80th International Pharmaceutical Federation

- World Congress of Pharmacy and Pharmaceutical Sciences. Seville, Spain. September 2022
- 79. Maria Bertoni, Benjamin Kennard, Derek Murrell, David Cluck, Jonathan Moorman, Ke-Sheng Wang, Michelle Duffourc, and Sam Harirforoosh. The Effect of Tenofovir Alafenamide or Tenofovir Disoproxil Fumarate on Renal Function of HIV-Infected Patients (poster presentation). 2020 American College of Clinical Pharmacy Annual Meeting. Virtual Conference. October 2020
- 78. Benjamin Kennard, Maria Bertoni, Derek Murrell, David Cluck, Jonathan Moorman, Ke-Sheng Wang, Michelle Duffourc, and Sam Harirforoosh. Differentiation of CD4 Lymphocyte Levels following Tenofovir Alafenamide or Tenofovir Disoproxil Fumarate Dosing (poster presentation). 2020 American College of Clinical Pharmacy Annual Meeting. Virtual Conference. October 2020
- 77. Benjamin Kennard, Maria Bertoni, Derek Murrell, David Cluck, Jonathan Moorman, Ke-Sheng Wang, Michelle Duffourc, and Sam Harirforoosh. An Analysis of CD4 Lymphocyte Levels in HIV-Infected Patients Treated with Dolutegravir, Elvitegravir, or Raltegravir (poster presentation). 2020 American College of Clinical Pharmacology Annual Meeting. Virtual Conference. September 2020
- 76. Maria Bertoni, Benjamin Kennard, Derek Murrell, David Cluck, Jonathan Moorman, Ke-Sheng Wang, Michelle Duffourc, and Sam Harirforoosh. An Evaluation of Gastrointestinal Adverse Events in Patients Receiving Tenofovir Alafenamide vs. Tenofovir Disoproxil Fumarate (poster presentation). 2020 American College of Clinical Pharmacology Annual Meeting. Virtual Conference. September 2020
- 75. Zhelin Liu, Derek Murrell, and Sam Harirforoosh. Comparison of Simulated Drug Concentrations with in-vivo Data Obtained from HIV Patients Receiving Dolutegravir-Based Therapy (poster presentation). 2020 American College of Clinical Pharmacology Annual Meeting. Virtual Conference. September 2020
- 74. DL Hurley, S Harirforoosh, V Palau, T Ensley, S Lawson, AK Lowe, M Lockhart, J Sondergaard, and M Tucker. Personal PGx analysis for all first-year PharmD students: A foundation for guided implementation (poster presentation). University of Minnesota Biennial Pharmacogenomics Conference. Virtual Conference. September 2020
- 73. Rick Hess, Adam Welch, John Bossaer, Jim Thigpen, Sam Harirforoosh, and Sam Karpen. Does P3 OSCE Performances Accurately Predict APPE Readiness? (poster presentation). 2020 American Association of Colleges of Pharmacy Annual Meeting. Virtual Conference. July 2020
- 72. Hadii Mamudu, Arsham Alamian, Timir Paul, Antwan Jones, David Stewart, Sam Harirforoosh, Liang Wang, Sylvester Orimaye, Fenose Osedeme, Amy Poole, Adeola Awujoola, Gerard Blackwell, and Matthew Budoff. Prevalence of diabetes and

association between individual and multiple lifestyle risk factors and diabetes in a rural Appalachian population (poster presentation). 2019 American Public Health Association Annual Meeting and Expo. Philadelphia, PA. November 2019

- 71. Russell W. Fankhouser, Yaa Y. Anane, Derek E. Murrell, David L. Hurley, Hoa H. Quach, Kojo Abakah, Angela V. Hanley, Kenny W. Bullins, Hadii M. Mamudu, and Sam Harirforoosh. Kidney Injury Molecule-1 Blood Levels in Subjects with Type 2 Diabetes: Evaluation and Genetic Association Analysis (poster presentation). 2019 American College of Clinical Pharmacy Annual Meeting. New York, NY. October 2019
- 70. Derek E. Murrell, Kojo Abakah, Hoa H. Quach, John B. Schweitzer, Yaa Y. Anane, Russell W. Fankhouser, Angela V. Hanley, Kenny W. Bullins, Greg A. Hanley, Suman Dalal, and Sam Harirforoosh. Evaluation of Orally Administered Poly(lactic-coglycolic) Acid Nanoparticles on Rat Brain (poster presentation). 2019 American College of Clinical Pharmacy Annual Meeting. New York, NY. October 2019
- 69. Sam Harirforoosh. Students' perspective on the use of Desire2Learn and ExamSoft platforms for examination administration: 2018 update (poster presentation). 2019 American College of Clinical Pharmacy Annual Meeting. New York, NY. October 2019
- **68.** Haley N. Bradshaw, Amber N. Seay, Derek E. Murrell, Brianne N. Horton, Suman Dalal, and Sam Harirforoosh. Polymeric nanoformulation of an antidiabetic drug, Canagliflozin (poster presentation). 2019 American College of Clinical Pharmacy Annual Meeting. New York, NY. October 2019
- 67. Yaa Y. Anane, Russell W. Fankhouser, Derek E. Murrell, Kojo Abakah, Hoa H. Quach, Amber N. Seay, Angela V. Hanley, Kenny W. Bullins, David L. Hurley, and Sam Harirforoosh. Examination of Asymmetric Dimethylarginine Levels in the Presence and Absence of Type 2 Diabetes with Exploratory Genetic Association Analysis (poster presentation). 2019 American College of Clinical Pharmacology Annual Meeting. Chicago, IL. September 2019

(Selected for one of the eight Student Abstract Awards & as the top Student **Abstract in the area of Pharmacogenomics**)

- 66. Enaholo Omoike, Timir Paul, Stanley Ridner, Manul Awasthi, Sam Harirforoosh, and Hadii Mamudu. Association between Smoking Status and Homocysteine Levels and Possible Effect Modification by Cholesterol and Estradiol (poster presentation). 2019 Annual Meeting of the American College of Epidemiology, Pasadena, CA. September 2019
- 65. Lauren E. Dickerson, Derek E. Murrell, Darshan S. Shah, Stacy D. Brown, Cara L. Carter, and Sam Harirforoosh. The Concentration of Buprenorphine and Selected Metabolites in Neonate Cord Blood: An Exploratory Pharmacogenetic Analysis (poster presentation). International Union of Toxicology (IUTOX) 15th International Congress of Toxicology (ICTXV). Meeting. Honolulu, HI. July 2019

(Selected as the recipient of the Second Place International Congress of Toxicology **IUTOX** Trainee Award for best poster)

- 64. Russell W. Fankhouser, Derek E. Murrell, Allen S. Cofer, David L. Hurley, and Sam Harirforoosh. Exploratory Genetic Association of Type 2 Diabetes Occurrence using a Pharmacogenetic Panel (poster presentation). 15th International Congress of Toxicology Meeting. Honolulu, HI. July 2019
- 63. Derek Murrell, Amandeep Kaur, Ke-Sheng Wang, David Cluck, Jonathan P. Moorman, Michelle Duffourc, and Sam Harirforoosh. Pharmacogenetic evaluation of central nervous system adverse events across tenofovir prodrugs (poster presentation). 2019 European Congress of Clinical Microbiology & Infectious Diseases. Amsterdam. Netherlands. April 2019
- 62. Brieanne N. Horton, Derek E. Murrell, and Sam Harirforoush. The influence of initial drug loading on eprosartan PLGA nanoformulation (poster presentation). 2018 American Association of Pharmaceutical Scientists PharmSci 360 Conference. Washington, DC. November 2018
- 61. Derek Murrell, Ke-Sheng Wang, David Cluck, Jonathan P. Moorman, Michelle Duffourc, and Sam Harirforoush. Associations of ABCB1 polymorphisms with adverse events stratified by HIV integrase inhibitor (poster presentation). 2018 American College of Clinical Pharmacy Global Conference on Clinical Pharmacy (Selected as one of the posters offering Continuing Professional Education (CPE) during the conference). Seattle, WA. October 2018
- 60. Derek Murrell, Ke-Sheng Wang, David Cluck, Jonathan P. Moorman, Michelle Duffourc, and Sam Harirforoosh. Pharmacogenetic analysis of the gastrointestinal adverse effect profiles in HIV integrase inhibitor-based regimens (poster presentation). 2018 American College of Clinical Pharmacy Global Conference on Clinical Pharmacy. Seattle, WA. October 2018
- **59. Sam Harirforoosh**. Utilization of Desire2Learn and ExamSoft as Examination Administration Platforms: Pharmacy Students' Perspective (poster presentation). 2018 American College of Clinical Pharmacy Global Conference on Clinical Pharmacy. Seattle, WA. October 2018
- 58. Rick Hess, John Bossaer, Adam Welch, Sam Harirforoosh, and Sam Karpen. The Validation of an OSCE Assessment to Measure Student Pharmacist Competencies of Pre-APPE Domains (poster presentation). 2018 American Association of Colleges of Pharmacy Annual Meeting. Boston, MA. July 2018
- 57. Derek E. Murrell, Ke-Sheng Wang, David B. Cluck, Jonathan P. Moorman, and Sam Harirforosh. Genetic Polymorphisms of ABCB1, SLC15A2, VKORC1 Genes are Associated with Several Adverse Events in HIV Integrase Stand Transfer Inhibitor Usage

- (poster presentation). 2017 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Diego, CA. November 2017
- 56. Allen S. Cofer, Cara L. Carter, Derek E. Murrell, James W. Denham, and Sam Harirforoosh. Cardiac Outcomes Following Administration of a Celecoxib Nanoparticle Formulation in Rats (poster presentation). 2017 American College of Clinical Pharmacology Annual Meeting. San Diego, CA. September 2017
- 55. Cara L. Carter, Allen S. Cofer, Derek E. Murrell, James W. Denham, and Sam Harirforoosh. Effect of Diclofenac Nanoparticle Formulation on Rat Cardiac Tissue (poster presentation). 2017 American College of Clinical Pharmacology Annual Meeting. San Diego, CA. September 2017
- 54. Derek E. Murrell, David Cluck, Jonathan P. Moorman, Sam C. Karpen, and Sam Harirforosh. Comparison of Side Effect Profiles Among Integrase Strand Transfer Inhibitor Regimens (poster presentation). 2017 American College of Clinical Pharmacology Annual Meeting. San Diego, CA. September 2017
- 53. Stacy D. Brown, Fessou Eke Lawson-Hellu, Derek E. Murrell, and Sam Harirforoosh. Simultaneous determination of five antiretroviral drugs plus cobicistat in human plasma using strong cation mixed-mode SPE and HPLC-MS/MS (poster presentation). 254th American Chemical Society National Meeting & Exposition. Washington, DC. August 2017
- 52. Sam Harirforoosh. Assessment of student perception of several instructional approaches utilized in a pharmacokinetics course (poster presentation). 2017 American Association of Colleges of Pharmacy Annual Meeting. Nashville, TN. July 2017
- 51. Derek E. Murrell, David Cluck, Jonathan P. Moorman, Sam C. Karpen, and Sam Harirforosh. Evaluation of Renal and Hepatic Outcomes in HIV+ Individuals following Tenofovir Disoproxil Fumarate/Emtricitabine or Tenofovir Alafenamide/Emtricitabine plus Dolutegravir Regimens (poster presentation). 2017 Canadian Society for Pharmaceutical Sciences Annual Symposium. Montreal, QC. May **2017**
- 50. Derek E. Murrell, David Cluck, Jonathan P. Moorman, Sam C. Karpen, and Sam Harirforoosh. Comparison of Renal Effects following Elvitegravir, Cobicistat, Emtricitabine, and Tenofovir Disoproxil Fumarate or Tenofovir Alafenamide Regimens in HIV-infected Patients (poster presentation). 2017 Canadian Society for Pharmaceutical Sciences Annual Symposium. Montreal, QC. May 2017
- 49. Derek E. Murrell, Stacy D. Brown, Fessou Eke Lawson-Hellu, and Sam Harirforoosh. Improving Relative Bioavailability of Orally Dosed Aliskiren through Poly(lactic-co-glycolic) Acid Nanoformulation in Rats (poster presentation). 2017

Canadian Society for Pharmaceutical Sciences Annual Symposium. Montreal, QC. May **2017**

- 48. Regan Sevinsky, David Stewart, Steven Smith, Fereshteh Gerayli, Christopher Bridges, and Sam Harirforoosh. A pilot study to investigate cardiovascular adverse effects of a class of pain relievers (podium presentation). 48th Southeastern Residency Conference. Athens, GA. April **2017** (Encore Presentation)
- 47. Regan Sevinsky, Sam Harirforoosh, David Stewart, Fereshteh Gerayli, Christopher Bridges. Pilot study to investigate cardiorenal adverse effects of NSAIDs (poster presentation). 2016 American Society of Health-System Pharmacists' Midyear Clinical Meeting and Exhibition. Las Vegas, NV. December 2016
- 46. Crystal L. Whitted, Victoria E. Palau, Ruben D. Torrenegra, Oscar E. Rodriguez, and Sam Harirforoosh. The Use of Reverse Phase High Performance Liquid Chromatography to Determine 5, 7–dihydroxy-3, 6, 8–trimethoxy Flavone and 3, 5– dihydroxy-6, 7, 8-trimethoxy Flavone Concentrations in Rat Colon Tissue (poster presentation). 2016 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. Denver, CO. November 2016
- 45. Sam Harirforoosh, Kelsi O. West, and Derek E. Murrell. The Effect of Celecoxib Poly(lactic-co-glycolic) Acid Nanoformulation on Renal and Gastrointestinal Outcomes in Rats (poster presentation). 2016 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. Denver, CO. November 2016
- 44. Sam Harirforoosh, Kelsi O. West, and Derek E. Murrell. Examination of Poly(lactide-co-glycolide) Nanoparticle Formulation on Diclofenac-associated Gastrointestinal and Renal Side Effects in Rats (poster presentation). 2016 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. Denver, CO. November 2016
- 43. Derek E. Murrell, Hannah V. Oakes, Jessica M. Coleman, Angela V. Hanley, Kenny W. Bullins, Greg A. Hanley, and Sam Harirforoosh. Effect of Aliskiren Nanoformulation on Rat Kidney Function (poster presentation). 2016 Society of Toxicology Annual Meeting and Exposition. New Orleans, LA. March 2016
- 42. Crystal L. Whitted, Angela V. Hanley, Kenneth W. Bullins, Derek E. Murrell, Victoria E. Palau, Ruben Torrenegra, and Sam Harirforoosh. Pharmacokinetics of 5,7-Dihydroxy-3,6,8-trimethoxy-2-phenyl-4H-chromen-4-one in Rats (poster presentation). 2015 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. Orlando, FL. October 2015
- 41. Evaluation of Kidney Histopathology and Renal Drug Concentration of Celecoxib Loaded Polylactic-co-Glycolic Nanoparticles in Rats. Sam Harirforoosh, Dustin L. Cooper, Derek E. Murrell, James W. Denham, Peter C. Panus, Angela V. Hanley, Kenny

- W. Bullins, and Greg A. Hanley (poster presentation). 2015 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. Orlando, FL. October 2015
- **40.** Effect of Diclofenac Loaded Polylactic-co-Glycolic Nanoparticles on Kidney Histopathology in Rats. Sam Harirforoosh, Dustin L. Cooper, Derek E. Murrell, James W. Denham, Peter C. Panus, Angela V. Hanley, Kenny W. Bullins, and Greg A. Hanley (poster presentation). 2015 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. Orlando, FL. October 2015
- **39.** Dustin L. Cooper, Angela V. Hanley, Kenny W. Bullins, Greg A. Hanley, Jennifer L. Hoard, Jessica M. Coleman, and <u>Sam Harirforoosh</u>. Assessment of relative bioavailability of diclofenac loaded poly(lactide-co-glycolide) nanoparticles after oral administration (poster presentation). 2015 American College of Clinical Pharmacology Annual Meeting. San Francisco, CA. September 2015
- 38. Bryan R. Gunter, Kristen A. Butler, Richard L. Wallace, Nakia Woodward, Steven M. Smith, and Sam Harirforoosh. NSAIDs-induced cardiovascular adverse effects: a meta-analysis (poster presentation). 2015 American Pharmacists Association Annual Meeting & Exposition. San Diego, CA. March 2015
- 37. Crystal L. Whitted, Dustin L. Cooper, Victoria E. Palau, Ruben Torrenegra, and Sam Harirforoosh. A Reversed-phase high performance liquid chromatography method for the quantitative determination of a flavone in rat plasma (poster presentation). 2015 American Pharmacists Association Annual Meeting & Exposition. San Diego, CA. March 2015
- **36.** Jessica M. Coleman, Dustin L. Cooper, and Sam Harirforoosh. Formulation and optimization of aliskiren loaded poly(lactide-co-glycolide) nanoparticles (poster presentation). 2015 American Pharmacists Association Annual Meeting & Exposition. San Diego, CA. March 2015
- 35. Derek E. Murrell and Sam Harirforoosh. Analysis of concomitant rebamipide influence on celecoxib concentration in the rat liver (poster presentation). 2015 American Pharmacists Association Annual Meeting & Exposition. San Diego, CA. March 2015
- 34. Derek E. Murrell, Yuyun Rahmasari, John D. Harrell, James W. Denham, Kenneth W. Bullins, Angela V. Hanley, Peter C. Panus, and Sam Harirforoosh. An Examination of Hepatic Effects during Diclofenac or Celecoxib Administration in the Presence or Absence of Rebamipide (poster presentation). 2014 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Diego, CA. November 2014
- 33. Dustin L. Cooper, Angela V. Hanley, Kenny W. Bullins, Greg A. Hanley, Jessica M. Coleman, and Sam Harirforoush. Polylactic-co-glycolic nanoparticle encapsulation improves oral bioavailability of celecoxib in rats (poster presentation). 2014 American

Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Diego, CA. November 2014

- **32.** Dustin L. Cooper, Jennifer, A. Carmical, Peter C. Panus, and Sam Harirforoosh. Effects of niacin loaded polymeric nanoparticles on *in vitro* prostaglandin expression (poster presentation). 2014 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Diego, CA. November 2014
- **31.** Derek E. Murrell, Dustin L. Cooper, and **Sam Harirforoosh**. The effect of concomitant misoprostol on hepatic celecoxib concentration (poster presentation). 2014 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Diego, CA. November 2014
- 30. Crystal Whitted, Dustin Cooper, Victoria Palau, Ruben Torrenegra, and Sam Harirforosh. Development of a high performance liquid chromatography method for quantification of a flavone in rat plasma (poster presentation). 2014 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Diego, CA. November 2014
- 29. Derek E. Murrell and Sam Harirforoosh. A Quantitative Model for Prediction of Hepatic Diclofenac Concentration following a Single Oral Dose (poster presentation). The 5th American Conference on Pharmacometrics. Las Vegas, NV. October **2014**
- 28. Derek E. Murrell, John Harrell, Yuyun Rahmasari, Dustin L. Cooper, Angela V. Hanley, Kenneth W. Bullins, and Sam Harirforoush. Evaluation of hepatic oxidative stress in rats following celecoxib and misoprostol concomitant administration (poster presentation). 2014 American College of Clinical Pharmacology Annual Meeting. Atlanta, GA. September 2014
- 27. Dustin L. Cooper and Sam Harirforoosh. Characterization of PVA and DMAB based Celecoxib Loaded Polymeric Nanoparticles (poster presentation). 41st Annual Meeting & Exposition of the Controlled Release Society. Chicago, IL. July 2014
- 26. Jennifer A. Carmical, Dustin L. Cooper, Sam Harirforoosh. Formulation and Characterization of Niacin Loaded PLGA-Based Nanoparticles (poster presentation). 41st Annual Meeting & Exposition of the Controlled Release Society. Chicago, IL. July 2014
- 25. Jennifer Carmical, Dustin Cooper, and Sam Harirforoosh. Niacin loaded PLA nanoparticles: preparation and physiochemical characterization (poster presentation). 2014 Appalachian Research Student Forum. Johnson City, TN. April 2014
- **24.** Dustin Cooper and **Sam Harirforoosh**. Effect of drug amount and emulsifier on the characterization of celecoxib polymorphic nanoparticles (podium presentation). 2014 Appalachian Research Student Forum. Johnson City, TN. April 2014

- 23. Derek Murrell, Dustin Cooper, James Denham, Yuvun Rahmasari, John Harrell, Maxwell Lee, Kelsey Bolling, and Sam Harirforoosh. Hepatic effects of concomitant administration of celecoxib and misoprostol in rats (poster presentation). 2014 Appalachian Research Student Forum. Johnson City, TN. April 2014
- **22.** Dustin L. Cooper, Peter C. Panus, and <u>Sam Harirforosh</u>. Effect of Diclofenac on Urinary Concentration and Excretion of Rebamipide (poster presentation). 2014 American Society for Clinical Pharmacology and Therapeutics Annual Meeting. Atlanta, GA. April **2014**
- 21. Derek E. Murrell, Dustin L. Cooper, Christopher M. Conder, Grace E. Campbell, Shaun P. Lynch, Angela V. Hanley, Kenneth W. Bullins, Krishna Singh, James W. Denham, Peter C. Panus, Gregory A. Hanley, and Sam Harirforoosh. Effects of misoprostol on celecoxib-induced renal toxicity and cardiac levels of celecoxib (poster presentation). 2013 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Antonio, TX. November 2013

(Selected to receive a travelship from the Clinical Pharmacology and Translational **Research Section of AAPS)**

- 20. Dustin L. Cooper, Kenneth W. Bullins, Angela V. Hanley, and Sam Harirforosh. Effects of selected non-steroidal anti-inflammatory drugs on the pharmacokinetics of rebamipide in rats (poster presentation). 2013 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Antonio, TX. November 2013
- 19. Dustin L. Cooper, Derek E. Murrell, Christopher M. Conder, Grace E. Campbell, Shaun P. Lynch, Angela V. Hanley, Kenneth W. Bullins, James W. Denham, Peter C. Panus, Gregory A. Hanley, Krishna Singh, Janet W. Lightner, Rhett N. Byrne, Jennifer L. Hoard, and Sam Harirforoosh. Exacerbation of renal injury associated with celecoxib by concomitant administration of misoprostol in rats: effect of misoprostol on kidney celecoxib levels (poster presentation). 2013 American College of Clinical Pharmacology Annual Meeting. Bethesda, MD. September 2013
- **18.** Dustin Cooper, Christopher Conder, Grace Campbell, Shaun Lynch, Derek Murrell, Angela Hanley, and Sam Harirforoosh. Effect of concomitant administration of misoprostol on celecoxib plasma levels in rats (podium presentation). 2013. Johnson City, TN. April 2013
- 17. Dustin Cooper, Christopher Conder, Grace Campbell, Shaun Lynch, Derek Murrell, and Sam Harirforoosh. Effect of rebamipide on plasma protein binding of celecoxib or diclofenac (poster presentation). 2013 Appalachian Research Student Forum. Johnson City, TN. April 2013
- 16. Dustin L. Cooper, Christopher M. Conder, Grace E. Campbell, Shaun P. Lynch, Rhett N. Byrne, Angela V. Hanley, Kenneth W. Bullins, Gregory A. Hanley, Jennifer L. Hoard, Krishna Singh, and Sam Harirforoosh. Effect of an EP receptor agonist on cardiorenal

toxicity of celecoxib in rats (podium and poster presentation). 2013 American Pharmacists Association Annual Meeting & Exposition. Los Angeles, CA. March 2013.

- 15. Dustin L. Cooper, Kenneth W. Bullins, Angela V. Hanley, Gregory A. Hanley, John A. Ewing, Clarence D. Gwanbobmuga, Christopher M. Conder, and Sam Harirforoosh. Pharmacokinetic of selected nonsteroidal anti-inflammatory drugs in the presence or absence of rebamipide (poster presentation). The 5th Annual Nanotechnology Symposium. Louisville, KY. September 2012
- 14. Robert Wood, Jarrett Wyatt, Kenneth Bullins, Angela Hanley, Gregory Hanley, Kimberly Henson, James Ledford, John Ewing, Justin Connor, Sam Harirforosh. NSAID's renal effect following concomitant rebamipide administration (poster presentation). 2012 American College of Clinical Pharmacology Annual Meeting. San Diego, CA. September 2012
- 13. Jarrett Wyatt, Robert Wood, Kenneth Bullins, Angela Hanley, Gregory Hanley, Kimberly Henson, James Ledford, John Ewing, Justin Connor, Sam Harirforosh. NSAID's renal effect following concomitant rebamipide administration (podium presentation). 2012 Appalachian Research Student Forum. Johnson City, TN. April 2012
- 12. Robert Wood, Kenneth Bullins, Angela Hanley, Jarrett Wyatt, Kimberly Henson, James Ledford, John Ewing, Justin Connor, Sam Harirforoosh. Effect of rebamipide on the renal toxicity of celecoxib or diclofenac in rats (poster presentation). 2011 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. Washington, DC. October 2011
- 11. Jarrett Wyatt, Robert Wood, Kenneth Bullins, Angela Hanley, Gregory Hanley, Kimberly Henson, James Ledford, John Ewing, Justin Connor, Sam Harirforoosh. Effects of rebamipide on nephrotoxicity associated with diclofenac administration (poster presentation). American College of Clinical Pharmacology 40th Annual Meeting. Chicago, IL. September 2011

(Selected for one of the eight Student Abstract Awards)

- 10. Katherine Morris, Paul Forsythe, Sam Harirforoosh, Ryan Hoeve, Ron Mathison, A. Dean Befus. Regulation of secretion of anti-inflammatory prohormone SMR1 by autonomic stimulation in rat submandibular glands. The Canadian Allergy, Asthma and Immunology Foundation Annual Scientific Meeting, Edmonton. Alberta, September 2007
- 9. Sam Harirforoosh, Paul Forsythe, Mavanur R. Suresh, and A. Dean Befus. Characterization of SMR-1 in lysates of rat submandibular glands (poster presentation). Department of Medicine Research Day. Edmonton, Alberta. 2006
- 8. Sam Harirforoosh, Paul Forsythe, Mayanur R. Suresh, and A. Dean Befus. Neuroendocrine control of allergic inflammation: characterization of antibodies to the

prohormone SMR-1 in lysates of rat submandibular glands (poster presentation). AllerGen's First Annual Research Conference: Innovation from Cell to Society. Toronto, Ontario. October 2005

- 7. Sam Harirforoosh and Fakhreddin Jamali. Effect of COX-2-selective nonsteroidal anti-inflammatory drugs (NSAIDS) on kidney function of inflamed rats (poster presentation). 8th Canadian Society for Pharmaceutical Sciences Annual Symposium. Toronto, Ontario. May 2005
- 6. Sam Harirforoosh, Ali Aghazadeh-Habashi, and Fakhreddin Jamali. The extent of Renal effects of nonsteroidal anti-inflammatory drugs (NSAIDs) is pharmacokineticdependent (poster presentation). 7th Canadian Society for Pharmaceutical Sciences Annual Symposium. Vancouver, British Colombia. June 2004
- 5. Sam Harirforoosh and Fakhreddin Jamali. The effect of chronic inflammation on pharmacokinetics of rofecoxib and meloxicam in the Rat (poster presentation). Faculty of Pharmacy Research Day. Edmonton, Alberta. 2004
- 4. JM Gamble, Sam Harirforoosh, and Fakhreddin Jamali. Effects of celecoxib on kidney function (poster presentation). 6th Canadian Society for Pharmaceutical Sciences Annual Symposium. Montreal, Quebec. May 2003
- 3. Sam Harirforoosh and Fakhreddin Jamali. Higher trough rofecoxib concentrations are associated with higher degrees of sodium retention in rats (poster presentation). Faculty of Pharmacy Research Day. Edmonton, Alberta. 2003
- 2. Sam Harirforoosh and Fakhreddin Jamali. The effects of COX-2 inhibitors on renal sodium and potassium excretion in rats (poster presentation). 2002 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. Toronto, Ontario. November 2002
- 1. Sam Harirforoosh and Fakhreddin Jamali. Kidney side effects of COX-2 inhibitors are not COX-1/COX-2 ratio related (poster presentation). 5th Canadian Society for Pharmaceutical Sciences Annual Symposium. Banff, Alberta. June 2002

PHARMACEUTICAL CONSULTING EXPERIENCE

Contract Research Organization, Amarex Clinical Research, LLC, MD, United States, March 2022 – March 2024

PROFESSIONAL SERVICE

Professional Affiliations

American Heart Association (AHA)

American College of Clinical Pharmacology (ACCP) American Association of Colleges of Pharmacy (AACP) Alberta College of Pharmacy (ACP) International Association for the Study of Pain (IASP)

Editorial Board Memberships

Clinical Pharmacokinetics, March 2017 - Present European Journal of Drug Metabolism and Pharmacokinetics, June 2017 - Present Heliyon, March 2017 - June 2019 *Journal of Integrative Nephrology and Andrology*, August 2015 - June 2019

Invited Oral Presentations

Transdermal Drug Delivery Systems. Chapman University School of Pharmacy and Pharmaceutical Sciences. Irvine, California. July 15, 2022

Are cardiorenal adverse events associated with non-steroidal anti-inflammatory drugs linked to their pharmacokinetics? University of California, Irvine School of Pharmacy & Pharmaceutical Sciences. Virtual Seminar. May 6, 2022

Clinical pharmacology of prescription opioids, heroin, and fentanyl and their adverse effects The Opioid Overdose Epidemic: Trends, Harms and Treatment. 2020 American College of Clinical Pharmacology Annual Meeting. Virtual Conference. September 22, 2020

Pharmacogenetics of HIV Drugs: A focus on Integrase Inhibitors. Latest advances in treatment, prophylaxis and pharmacogenomics of HIV. 2019 American College of Clinical Pharmacology Annual Meeting. Chicago, Illinois. September 16, 2019

Pharmacokinetic Models: A Focus on One Compartment Model Following Intravenous Bolus Injection. California Northstate University College of Pharmacy. Sacramento, California. August 23, 2018

Clinical Pharmacology of Opioids and Their Adverse Effects. Opioid Abuse and Misuse: a Rising Epidemic in America. 2017 American College of Clinical Pharmacology Annual Meeting. San Diego, California. September 19, 2017

Opioid Analgesics and Antagonists. West Coast University. Los Angeles, California. July 28, 2017

The prevention of Renal Adverse Effects of NSAIDs. Keck Graduate Institute. Claremont, California. October 20, 2016

Pharmacogenetics of HIV Drugs. Workshop 2: HIV/AIDS: Treatment, Pharmacogenetics & Pre-Exposure Prophylaxis Pharmacogenetics of HIV Drugs. 2016 American College of Clinical Pharmacology Annual Meeting. Bethesda, Maryland. September 24, 2016

Pharmacogenomics: Genomics and Drug Response. Personalized Anticancer Strategy: from Innovation to Impact. 2016 International Pharmaceutical Federation World Congress of Pharmacy & Pharmaceutical Sciences. Buenos Aires, Argentina. August 30, 2016

Pharmacogenomics of HIV Medications. An Update on HIV Treatment, Prevention and Drug Development. 2015 American College of Clinical Pharmacology Annual Meeting. San Francisco, California. September 28, 2015

GLP and GMP Requirements: What They Mean. Short course on Drug Development and Discovery by FDA Standards. 2014 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Diego, California. November 2, 2014

GMP Requirement: What It Means. Short course on Drug Development and Discovery by FDA Standards. 2013 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Antonio, Texas. November 10, 2013

Effect of an EP Receptor Agonist on Renal Toxicity of Celecoxib in Rats. Internal Medicine Research Seminar Series, East Tennessee State University. Johnson City, Tennessee. February 26, 2013

Exacerbation of diclofenac-induced nephrotoxicity in rats by rebamipide. Philadelphia College of Osteopathic Medicine. Suwanee, Georgia. July 24, 2012.

Principles of non-linear pharmacokinetics. West Coast University. Los Angeles, California. July 11, 2012

Effects of rebamipide on nephrotoxicity associated with selected NSAIDs. Internal Medicine Research Seminar Series, East Tennessee State University. Johnson City, Tennessee. February 28, 2012

Renal adverse effects of nonsteroidal anti-inflammatory drugs. Internal Medicine Research Seminar Series, East Tennessee State University. Johnson City, Tennessee. September 22, 2009

Renal effects of COX-2-selective inhibitors. East Tennessee State University, College of Pharmacy. February 28, 2007

Invited Chair or Co-chair at Scientific Meetings

Chair – The Opioid Overdose Epidemic: Trends, Harms and Treatment. 2020 American College of Clinical Pharmacology Annual Meeting. Virtual Conference. September 22, 2020

Chair – Latest advances in treatment, prophylaxis and pharmacogenomics of HIV. 2019 American College of Clinical Pharmacology Annual Meeting. Chicago, Illinois. September 16, 2019

Co-chair – Opioid Abuse and Misuse: a Rising Epidemic in America. 2017 American College of Clinical Pharmacology Annual Meeting. San Diego, California. September 19, 2017

Co-chair – Workshop 2: HIV/AIDS: Treatment, Pharmacogenetics & Pre-Exposure Prophylaxis Pharmacogenetics of HIV Drugs. 2016 American College of Clinical Pharmacology Annual Meeting. Bethesda, Maryland. September 24, 2016

Co-chair – Symposium 5: An Update on HIV Treatment, Prevention and Drug Development. 2015 American College of Clinical Pharmacology Annual Meeting. San Francisco, California. September 28, 2015

Co-chair – Short course on Drug Development and Discovery by FDA Standards. 2013 American Association of Pharmaceutical Scientists Annual Meeting and Exposition. San Antonio, TX. November 10, 2013

Served as a Grant Reviewer for;

2020 Research Development Committee Major Grants, East Tennessee State University 2019 Research Development Committee Small Grants, East Tennessee State University 2019 Research Development Committee Interdisciplinary Grants, East Tennessee State University

2018 Research Development Committee Major Grants, East Tennessee State University 2016 Research Development Committee Interdisciplinary Grants, East Tennessee State University

2014 Research Development Committee Major Grants, East Tennessee State University 2013 Research Development Committee Small Grants, East Tennessee State University 2012 Research Development Committee Major Grants, East Tennessee State University 2012 Research Development Committee Small Grants, East Tennessee State University 2011 Research Development Committee Major Grants, East Tennessee State University

Served as a Peer Reviewer* for;

American Journal of Pharmaceutical Education Biomedicine & Pharmacotherapy BMC Geriatrics Clinical Drug Investigation Clinical and Experimental Pharmacology and Physiology Clinical Pharmacokinetics Clinical Pharmacology & Therapeutics Current Clinical Pharmacology Current Drug Metabolism Current HIV Research

DNA and Cell Biology

Drug Development and Industrial Pharmacy

Drug Metabolism Letters

Drugs

European Journal of Drug Metabolism and Pharmacokinetics

Expert Opinion on Drug Safety

Food and Chemical Toxicology

International Journal of STD & AIDS

Journal of Drug Issues

Journal of Integrative Nephrology and Andrology

Journal of International Medical Research

Journal of Microencapsulation

Journal of Pain Research

Journal of Pharmacokinetics and Pharmacodynamics

Journal of Pharmacy and Pharmaceutical Sciences

Journal of Pharmacy and Pharmacology

Molecular Pharmaceutics

Pharmaceutical Biology

Pharmacogenomics

PLoS ONE

Postgraduate Medicine

The Open AIDS Journal

The Pharmacogenomics Journal

Toxicology Research and Application

Served as a Judge at;

2025 Chapman University School of Pharmacy Research Day, Irvine, California 2017 Canadian Society of Pharmaceutical Sciences Annual Symposium, Montreal, Quebec

2017 Appalachian Student Research Forum, Johnson City, Tennessee

2015 Appalachian Student Research Forum, Johnson City, Tennessee

2013 Appalachian Student Research Forum, Johnson City, Tennessee

2012 Appalachian Student Research Forum, Johnson City, Tennessee

Served as a Track Screening Chair for Clinical Pharmacology, **Chemical Entities for;**

2018 AAPS Annual Meeting

Served as an Abstract Screener for;

2017 AAPS Annual Meeting 2016 AAPS Annual Meeting 2015 AAPS Annual Meeting

^{*}Recognized by the Publons Board as one of the top 10% of researchers contributing to the peer review of the field of Pharmacology, Toxicology, and Pharmaceutics in 2016

2014 AAPS Annual Meeting 2013 AAPS Annual Meeting (Two rounds) 2012 AAPS Annual Meeting 2011 AAPS Annual Meeting 2010 FIP PSWC/AAPS Annual Meeting

Served as a Reviewer for Book or Journal Proposals

Principles of the Human Genome and Pharmacogenomics (Book) Trends in Pharmacogenetics and Pharmacogenomics (Journal)

Served as an External Evaluator for Promotion Application

2023 Washington State University

INSTITUTIONAL SERVICE

Chapman University School of Pharmacy

Faculty Review Committee, 2024 to present Full Professor Review Committee, 2023 to present Student Affairs Committee, 2023 to present

Culture Committee, 2022 to 2024 Faculty and Governance Self-Study Group, 2022 to 2024 Assessment Committee, 2022 to 2023

East Tennessee State University

Institutional Review Board Search Committee, 2015 Center for Inflammation, Infectious Disease, and Immunity, 2014 to 2022 ETSU/VA Medical Campus Institutional Review Board, 2009 to 2022

Gatton College of Pharmacy

Teaching, Learning, and Technology Committee, 2021 to 2022 College Tenure and Promotion Committee

Chair, 2020 & 2021

Research Track Oversight Committee, 2020

Objective Structured Clinical Examination (OSCE) Development Subcommittee, 2017 to 2022

Equity and Inclusion Council, 2020

Scholarship & Awards Committee, 2007 to 2021

Admission Committee, 2007 to 2022

Departmental Tenure and Promotion Committee, 2016

Third Year Review Committee, 2014

College Tenure and Promotion Committee, 2013, 2014, 2016, and 2017

Pharmaceutical Sciences Search Committee, 2008 to 2011 and 2017

Chair, 2010 to 2011

Technology Committee, 2009 to 2011 - 2015 to 2018

Assessment Committee, 2008 to 2009

MENTORING EXPERIENCE

PhD Student Advisor for;

Derek Murrell

Fall 2012 – Summer 2018 Graduation date: August 2018

Dustin Cooper

Fall 2011 – Summer 2015

PharmD Student Research Advisor for;

Goldie La Fall 2024, Spring 2025, and Summer 2025

Spring 2024 and Summer 2024 Lorena Brady Jayesh Jani Spring 2024 and Summer 2024

Carrie Vasquez Spring 2024

Yaseman Jahromi Fall 2023 and Spring 2024

Summer 2023, Fall 2023, Spring 2024, and Summer 2024 Eddie Daniel

Summer 2023, Fall 2023, and Spring 2024 Melissa Hoang Amelia Monfared Summer 2023, Fall 2023, and Spring 2024

Amber Seay Spring 2019 Zhelin Liu Spring 2019 Hoa Ouach Spring 2019 Benjamin Kennard Spring 2019

Lauren Dickerson Fall 2018 and Spring 2019

Russell Fankhouser Fall 2018, Spring 2019, Summer 2019, Fall 2019, and

Spring 2020

Fall 2018 and Spring 2019 Kojo Abakah

Yaa Anane Spring 2018, Summer 2018, Fall 2018, and Spring 2019

Spring 2018 and Fall 2018 Deep Patel

Spring 2017, Fall 2017, and Spring 2018 Cara Carter

Allen Cofer Fall 2016, Spring 2017, Fall 2017, and Spring 2018

Maxwell Lee Spring 2014

Spring 2014, Summer 2014, Fall 2014, and Spring 2015 Kristen Butler

Kristen Lester Spring 2014 and Summer 2014

Jennifer Carmical Spring 2014 Kelsey Bolling Spring 2014

Yuyun Rahmasari Spring 2014, Fall 2014, and Spring 2015

Russ Gunter Spring 2014 and Summer 2014

Spring 2014 JD Harrell

Spring 2012, Summer 2012, Fall 2012, and Spring 2013 Christopher Conder

Gracie Campbell Spring 2012, Fall 2012, and Spring 2013 Shaun Lynch Spring 2012, Fall 2012, and Spring 2013

Spring 2012 Rhett Byrne Clarence Gwanbobmuga Fall 2011

Jarrett Wyatt Spring 2011, Fall 2011, and Spring 2012

Robert Wood Spring 2011 and Spring 2012 Spring 2011 and Fall 2011 John Ewing

Spring 2011 Kimberly Henson James Ledford Spring 2011 Justin Connor Spring 2011 Spring 2010 Wesley Pettit

Honors Scholar Research Advisor for;

Haley Bradshaw Spring 2018, Fall 2018, and Spring 2019 Jessica Coleman Summer 2014, Fall 2014, and Spring 2015

Undergraduate Student Research Advisor for;

Brieanne Horton Spring 2018

Laboratory Rotation Mentor for;

Hannah McNeill Summer 2015

PhD student

Preceptor for;

Amandeep Kaur Spring 2018

Epidemiology MPH student

Kelsi West Spring 2016

Epidemiology MPH student

Research Associate Supervisor for;

Dr. Derek Murrell Fall 2018 – Spring 2019

Served on PhD Advisory Committee for;

Crystal Whitted Fall 2012 - Fall 2016

OTHER ACTIVITIES

PHARMACY EXPERIENCE

Pharmacist, Edmonton, Alberta, Canada, 2001 to 2007 Pharmacist, Iran, 1991 to 1998

SPECIALIZED COURSES & CERTIFICATIONS

PowerPak Pharmacist Certificate Program in Veterinary Pharmacy - Online Training, Postgraduate Healthcare Education, LLC, April 30, 2025

Preventing Harassment & Discrimination: Non-Supervisors (California) - Online Training, Chapman University, Sep 4, 2024

23-24 Ethics and Compliance Training - Online Training, Chapman University, 2023, 2024

CHOC Research Education: NIH Grant Writing & Funding Success Part 1 - Online Training, The CHOC Research Institute, July 19, 2023

Purposeful Conversations: How to Begin and Maintain DEI Dialogue in the

Workplace - Online Training, University of Massachusetts Global, Dec 6, 2022

Scholarship of Teaching and Learning (SoTL) Bootcamp – Online Training, The

University of North Carolina at Chapel Hill, November 3 and 10, 2022

Data Security & Privacy - Online Training, Chapman University, Sep 21, 2022

FERPA Basics - Online Training, Chapman University, Sep 21, 2022

Managing Bias- Online Training, Chapman University, Sep 21, 2022

Preventing Harassment & Discrimination Online Training, Chapman University, Sep 21, 2022

Safe Zone Training for Faculty and Staff - Online Training, East Tennessee State University, 2022

Biomedical Research Investigators and Key Personnel (VA), Collaborative Institutional Training Initiative, 2009, 2011, 2013, 2015, 2018, 2021

Preventing Harassment and Discrimination: Supervisors with Title IX/Clery

Module - Online Training, East Tennessee State University, 2021

HIPAA Training Part 2: The Security Rule - Online Training, East Tennessee State University, 2017, 2018, 2019, 2020, 202, 2022

HIPAA Training Part 1: The Privacy Rule - Online Training, East Tennessee State University, 2016, 2017, 2018, 2019, 2020, 2021

Preventing Harassment and Discrimination: Non-Supervisors with Title IX/Clery **Module** - Online Training, East Tennessee State University, 2020

Emergency Preparedness Training - Online Training, East Tennessee State University, 2020, 2021

Lab Safety #2 - Online Training, East Tennessee State University, 2017, 2018, 2019, 2020, 2021

Portable Fire Extinguishers - Online Training, East Tennessee State University, 2020, 2021

Bloodborne Pathogens - General - Online Training, East Tennessee State University, 2020, 2021

Hazard Communication - Online Training, East Tennessee State University, 2020, 2021 Hazardous Waste - Online Training, East Tennessee State University, 2020, 2021

COVID-19 Safety Pledge - Online Training, East Tennessee State University, 2020

Emergency Preparedness Training - Mountain Home VA Campus - Online Training, East Tennessee State University, 2020, 2021

Security Awareness Proficiency Assessment - Online Training, East Tennessee State University, 2020

Biosafety Lab - Online Training, East Tennessee State University, 2018, 2020, 2021, 2022

Harassment and Discrimination Prevention - Online Training, East Tennessee State University, 2019

Working with the IACUC, Collaborative Institutional Training Initiative, 2010, 2019 ETSU Environmental Health and Safety - Online Training, East Tennessee State University, 2012, 2013, 2014, 2015, 2016, 2017, 2018

Preventing Discrimination and Sexual Violence: Title IX, VAWA and Clery Act for Faculty and Staff - Online Training, East Tennessee State University, 2017, 2018 Title VI for Tennessee Faculty and Staff - Online Training, East Tennessee State University, 2017, 2018

Conflict of Interest Course, Collaborative Institutional Training Initiative, 2018 Creating Validated OSCEs in Pharmacy Education - East Tennessee State University, 2017

NIH Regional Seminar & Pre-Seminar Workshop (eRA System: Grant **Application**) - New Orleans, Louisiana, 2017

The online Animal Research Training Program Refresher, Collaborative Institutional Training Initiative, 2010, 2016

Title VI - Online Training, East Tennessee State University, 2015, 2016

Equity & Diversity - Respect in the Workplace - Online Training, East Tennessee State University, 205, 2016

Phoenix WinNonlin Workflows: Estimate Preclinical PK/PD Parameters for Anti-Cancer Agents, Webinar, Phoenix PK/PD Modeling Webinar Series, 2015 Advanced Methods in NONMEM® 7.3, American Conference on Pharmacometrics

Pre-Meeting Workshop; Las Vegas, Nevada, 2014

Preventing Sexual Harassment Refresher, East Tennessee State University, 2014 Financial Conflict of Interest Course, Collaborative Institutional Training Initiative, 2014

Intellectual Property Fundamentals Workshop, East Tennessee State University, 2012 Introduction to Population PKPD Analysis Using NONMEM 7: Special Emphasis on New EM Algorithms, American College of Clinical Pharmacology Pre-Meeting Workshop, 2010

Research Grant Development Course, East Tennessee State University, 2008-2009 American Association of Pharmaceutical Scientists Workshop on Pharmacogenetics in Individualized Medicine: Methods, Regulatory and Clinical application, American Association of Pharmaceutical Scientists, 2008

Peer Review Workshop, East Tennessee State University, 2008

Effective Management of Student Conduct, East Tennessee State University, 2008

Preventing Employment Discrimination, East Tennessee State University, 2008

Preventing Sexual Harassment, East Tennessee State University, 2008

Deire2Learn Overview-Advanced, East Tennessee State University, 2007

Deire2Learn Workshop-Respondus, East Tennessee State University, 2007

The Care and Use of Animals in Research, Teaching and Testing, University of Alberta, 2002

Teaching and Learning Effectiveness Sessions, University of Alberta, 2002

The Care and Use of the Laboratory Rat, University of Alberta, 2001 Radiation Safety Course, University of Alberta, 2001

HONORS, AWARDS, AND SCHOLARSHIPS

The Most Outstanding Teacher over the 2022-2023 Academic Year Presented by Class of 2025, Chapman University College of Pharmacy, 2023 Gatton College of Pharmacy 2014-2015 Outstanding Teacher Award Presented by Class of 2017, 2015

Faculty Excellence in Research Award, Gatton College of Pharmacy, 2014 Faculty Excellence in Research Award, Gatton College of Pharmacy, 2012 J Gordon Kaplan Graduate Student Award, University of Alberta, 2002